Prepared for: City of Albuquerque

Lead & Coal Studies

Final Report

March 2025

Prepared by:

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INTRODUCTION

This report documents the Existing Traffic Analysis, Speed Limit Reduction Alternative Analysis, Single-Lane Alternative Analysis, and Conversion to Two-Way Streets Alternative Analysis for the Lead and Coal Avenues Study in Albuquerque, NM. Per the guidelines provided in the Highway Capacity Manual (HCM), delay and level of service results were obtained to assess Lead and Coal Avenues from Broadway Boulevard to Washington Street as is. The Synchro 12 analysis software was used to conduct this analysis.

STUDY ORIGINS

Residents near Lead and Coal Avenues are profoundly concerned about road safety, mainly due to frequent crashes that damage property near the roadway. These crashes often involve vehicles colliding with walls, homes, and other structures adjacent to the road, making residents perceive an unsafe environment for pedestrian or bicyclist travel. In response to these safety issues, a study was conducted in 2007 to explore how road design could improve livability in the area, which led to a corridor redesign in 2012.

Despite these changes, safety concerns persisted among residents in the years following the redesign. This prompted the Federal Highway Administration (FHWA) to conduct a road safety audit (RSA) in June 2022 with the assistance of the Mid-Region Council of Governments (MRCOG). The RSA identified 19 recommendations to enhance safety; four initiatives were advanced for further study.

In November 2022, the Lead and Coal Working Group was established to facilitate dialogue between residents, the Mayor's administration, the City of Albuquerque's Department of Municipal Development, the District 6 City Councilor, and the Albuquerque Police Department. This forum allowed residents to voice their concerns and discuss the future of the corridors with city officials, ultimately leading to the initiation of this study.

This study builds on the RSA by providing a detailed analysis of the four initiatives: Reducing the Posted Speed Limit to 25 MPH, Single-Lane operation, Two-way Operation, and a Noise Assessment. The Lead and Coal Taskforce was created to offer input and compare the study's quantitative findings with residents' qualitative experiences to enhance community involvement. The task force met with the project team biweekly to stay informed and provide feedback.

This report documents the study's findings to guide the Lead and Coal Working Group in making informed decisions about the future of these corridors.

STUDY AREA

The study area extends from Broadway Boulevard east to Washington Street along Lead Avenue and Coal Avenue in Albuquerque, New Mexico. During the scoping meeting, Lead Avenue and Coal Avenue intersections from Broadway Boulevard through Washington Street were identified for analysis.

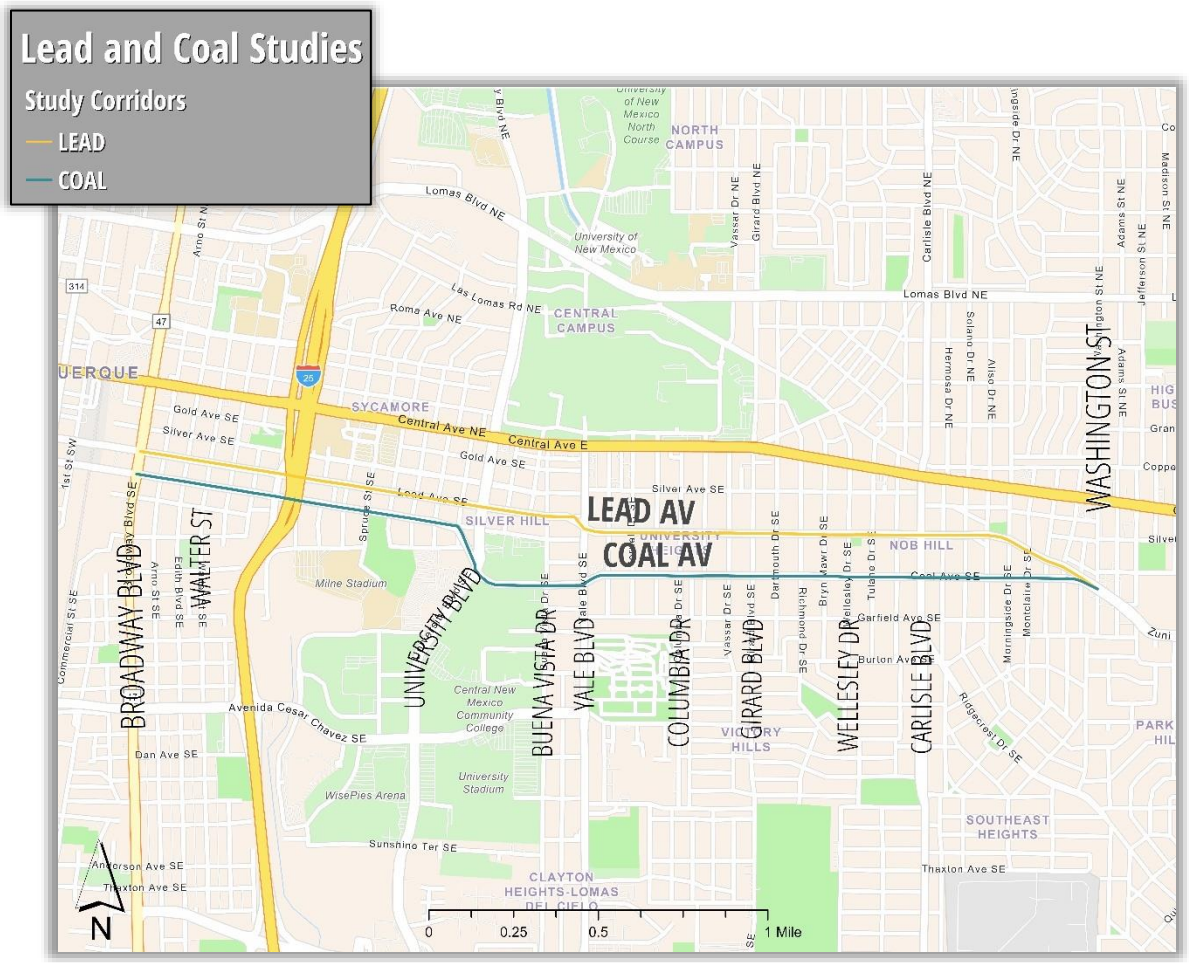


Figure 1: Study Area

DEMOGRAPHICS AND SOCIOECONOMIC PROFILE

Census tracts within one-half mile of the study corridor comprise the study area statistics. The Census Tracts comprise 5.03, 5.04, 11.01, 11.02, 12.01, 12.02, 14, 15, 17.01, 17.02, 18, 20, 21, and 49. The study area is in the southeast quadrant of Albuquerque, NM, with a population of 37,871. The median household income in the study area is $46,157, below the median income in city, county, and statewide. The percentage of the population with a disability is 17.3% within the study area, exceeding the city, county, and state. At 11.1%, the rate of households without a vehicle within the study area is greater than the city, county, and state rates, though the employment rate of 60.7% is above average.

Table 1: Selected Demographic Data - Source: 2023 American Community Survey 5-Year Estimates

	Study Area	Albuquerque	Bernalillo County	New Mexico
Population	37,871	562,488	674,357	2,114,768
Median Age	36.3	38.7	39.3	39.2
Median Household Income	$46,157	$65,604	$66,514	$62,125
Employment Rate	60.7%	60.4%	58.8%	53.5%
Hispanic or Latino	41.6%	47.9%	48.9%	48.2%
Percent of Population with a Disability	17.3%	15.2%	15.6%	16.7%
Rate of Households Without a Vehicle	11.1%	7.5%	7.0%	5.7%
Average Travel Time to Work (minutes)	18.3	22.2	22.9	23.2

Walking and bicycling may reflect one's travel preferences, but mode choice results from an individual's financial situation, city of residence, commute time and distance, and physical ability. The percentage of drivers who commute alone or carpool within the study area is significantly lower than in the city, county, and state. In contrast, the study area comprises 3.2% of people who ride bicycles and 8.4% of folks who walk. These proportions of bicyclists and pedestrians exceed the city, county, and state. The higher bicycle and pedestrian commuting rates may be due to a lower median income and a more significant proportion of households without a vehicle.

Table 2: Means of Transportation to Work - Source: 2023 American Community Survey 5-Year Estimates

Transportation Mode	Study Area	Albuquerque	Bernalillo County	New Mexico
Drove Alone	64.6%	73.2%	73.3%	75.1%
Carpooled	6.6%	8.8%	9.1%	9.6%
Public Transit	2.5%	1.3%	1.1%	0.7%
Bicycle	3.2%	0.9%	0.8%	0.5%
Walked	8.4%	1.9%	1.8%	2.0%
Other	1.2%	1.2%	1.1%	1.2%
Worked at Home	13.6%	12.8%	12.8%	11.0%

Previous and Concurrent Studies and Plans

Solutions for Albuquerque's Traffic Problems: A Comprehensive Program (1950)

A comprehensive study of Albuquerque's traffic issues was conducted in 1950 to provide recommendations ranging from signal timings to arterial street plans. The study offers recommendations for traffic ordinances, traffic engineering, arterial systems, parking, truck operations, public transit, traffic safety, zoning, and enforcement on a city-wide level.

New Vision for Lead & Coal Avenues (2007)

In 2005-06, following continued concerns regarding the impact of Lead & Coal Avenues on their neighborhoods, Wilson & Company assessed the corridor, a public involvement meeting was held, and a Stakeholder's Task Force was formed. Two recommendations were presented to city administration by the Task Force, both involving reducing the number of lanes on each roadway from three to two throughout the corridor. The options were to make Lead & Coal Avenues two-way roadways with one driving lane in each direction or one-way roadways, each with two driving lanes, and the addition of a bicycle lane.

Both recommendations were intended to reduce speeds, make the corridor more accessible to bicyclists and pedestrians, reduce accidents and traffic volumes, widen sidewalks, and meet ADA requirements. Other recommendations were also presented, including lighting, pedestrian pushbuttons, lane width restrictions, radar speed signs, red light cameras at signalized intersections, and quiet asphalt.

Road Safety Audit of Lead and Coal Avenues (Broadway Blvd. to Washington St.) (2019)

In 2019, the City of Albuquerque and a multidisciplinary team conducted a Road Safety Audit (RSA) of the Lead and Coal Avenue corridors between Broadway Boulevard and Washington Street. A total of 19 findings were graded on a scale of A through F, where the letter grades represent a priority level based on Crash Frequency and Crash Severity. The team concluded that the corridors present a variety of issues related to motorist behavior, corridor design, and infrastructure age and condition.

Lead Avenue and Coal Avenue Rest-in-Red Feasibility Study (2021)

The Lead Avenue and Coal Avenue Rest-in-Red Feasibility Study was conducted in 2021 to assess the impact and operations of a Rest-in-red scheme on Lead Avenue and Coal Avenue. Implementing Enhanced Rest-in-Red for these corridors was intended to aid with speed compliance and reduce crashes and crash severity, ultimately improving the quality of life of the residential areas on these corridors. The study recommended that Rest-in-red operations be implemented during the off-peak hours to start and adjust as needed.

City of Albuquerque 2024 Bikeway and Trail Facilities Plan (2024)

The City of Albuquerque produced a Bikeway and Trail Facilities Plan in 2024 to better manage the growth of the bikeway trail systems and ensure a safe and enjoyable experience for non-motorized users. Recommendations from this plan include bikeway facilities and crossing treatments to encourage people to choose bicycling as a mode of transportation.

Connections 2040 Metropolitan Transportation Plan (2020)

The Connections 2040 Metropolitan Transportation Plan was adopted in 2020. Its goal was to improve the efficiency of the movement of people and goods. The Mid-Region Council of Governments (MRCOG) provided a long-range plan for zoning, roadway networks, and other crucial infrastructure. It identifies gaps in the existing systems to give purpose and needs for work done in 2040.

EXISTING CONDITIONS

ROADWAY CHARACTERISTICS

Lead and Coal Avenues form a one-way couplet, with Coal running east and Lead running west. They are two-lane, one-way streets maintained by the City of Albuquerque. Between Broadway Boulevard and Washington Street, they comprise two 11-foot travel lanes; travel lanes narrow in some areas near intersections with auxiliary turn lanes. Pedestrian and bicycle facilities are present throughout the Lead and Coal corridors in the form of ADA-compliant sidewalks and bicycle lanes.

SIGNALIZED INTERSECTIONS

The following details are the traffic control and characteristics of the existing intersections in the study area:

Lead Avenue & Broadway Boulevard is a four-legged, three-way, signalized intersection. The east approach consists of a left-turn lane, two through lanes, and a right-turn lane. The north approach consists of two through lanes and a right-turn lane, while the south approach consists of a left-turn lane and two through lanes. Marked crossings, pedestrian signals, non-directional curb ramps, and detectable warning surfaces (DWS) are present at each leg of the intersection. DWS provides tactile feedback to alert pedestrians with visual impairments to curb ramps, pedestrian crossings, and transit stops. The marked crossing on the north leg of the intersection is disrupted by a median that does not appear to be used as a pedestrian refuge island.

Lead Avenue and Walter Street is a four-legged, three-way, signalized intersection. The east approach consists of two through lanes, while the north and south approaches each consist of a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present on the south corners, while non-directional curb ramps are present on the north corners.

Lead Avenue Cedar Street, Buena Vista Drive, Columbia Drive, and Wellesley Drive are four-legged, three-way, signalized intersections. The east approaches consist of two through lanes, and the north and south approaches consist of a through lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection.

Lead Avenue & Morningside Drive is a four-legged, three-way, signalized intersection. The east approach consists of two through lanes, while the north and south approaches consist of a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present at all crosswalks apart from the northwest corner, which is non-directional.

Lead Avenue and Locust Street is a four-legged, two-way, signalized intersection. The east approach consists of a left-turn lane and two through lanes, while the north approach consists of a through lane, a shared through/right-turn lane, and a right-turn lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at the intersection's west, north, and south legs.

Lead Avenue & Oak Street is a four-legged, two-way, signalized intersection. The east approach consists of three through lanes and a right-turn lane, while the south approach consists of a left-turn lane and two through lanes. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at the intersection's east, north, and south legs.

Lead Avenue and University Boulevard is a four-legged, three-way, signalized intersection. The east approach consists of two through lanes and a right-turn lane. The north approach consists of three through lanes, while the south approach consists of a left-turn lane and three through lanes. Marked crossings, pedestrian signals, and directional curb ramps are present at each leg of the intersection.

Lead Avenue & Yale Boulevard is a four-legged, three-way, signalized intersection. The east approach consists of a left-turn lane and two through lanes. The north approach consists of a through lane and a yield-controlled channelized right-turn lane, while the south approach consists of a left-turn lane and a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. A pedestrian refuge island is present on the intersection's northwest corner between the through lanes and channelized right turn lane from southbound Yale Boulevard and contains a pedestrian signal. Directional curb ramps are present at all crosswalks apart from the southeast corner, which is non-directional.

Lead Avenue and Girard Boulevard are a four-legged, three-way, signalized intersection. The east approach consists of two through lanes, while the north and south approaches consist of a shared through/bicycle lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection. A bicycle lane is present along the north side of Lead Avenue.

Lead Avenue and Carlisle Boulevard are a four-legged, three-way, signalized intersection. The east approach consists of two through lanes. The north approach consists of a through lane, while the south approach consists of a left-turn lane and a through lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection.

Coal Avenue & Broadway Boulevard is a four-legged, three-way, signalized intersection. The west approach consists of a left-turn lane, two through lanes, and a right-turn lane. The north approach consists of a left-turn lane and two through lanes, while the south approach consists of two through lanes and a shared right-turn/bicycle lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present on the north corners, while non-directional curb ramps are present on the south corners. The marked crossing on the south leg of the intersection is disrupted by a median that does not appear to be used as a pedestrian refuge island.

Coal Avenue & Walter Street is a four-legged, three-way, signalized intersection. The west approach consists of two through lanes, while the north and south approaches consist of a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present on the north corners, and non-directional curb ramps are present on the south corners.

Coal Avenue & Spruce Street is a four-legged, three-way, signalized intersection. The west approach consists of two through lanes, while the north and south approaches consist of a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present at all corners apart from the southeast corner.

Coal Avenue & Stanford Drive is a four-legged, three-way, signalized intersection. The west approach consists of two through lanes, while the north and south approaches consist of a through lane. Marked crossings, pedestrian signals, and directional curb ramps are present at each leg of the intersection. DWS are present at all crosswalks apart from the north side of the east leg.

Coal Avenue & Buena Vista Drive and Bryn Mawr Drive are four-legged, three-way, signalized intersections. The west approach has two through lanes, while the north and south approaches have a

through lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersections.

Coal Avenue & Locust Street is a four-legged, two-way, signalized intersection. The west approach consists of three through lanes, while the north approach consists of a left-turn lane, a shared left-turn/through lane, and a through lane. Marked crossings, pedestrian signals, and DWS are present at the intersection's west, north, and south legs. Directional curb ramps are present on the southeast and northwest corners, while non-directional curb ramps are present on the southwest and northeast corners.

Coal Avenue & Oak Street is a four-legged, two-way, signalized intersection. The west approach consists of a left-turn lane and two through lanes, while the south approach consists of two through lanes and a shared through/right-turn lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at the intersection's east, north, and south legs.

Coal Avenue & University Boulevard is a four-legged, three-way, signalized intersection. The west approach consists of a left-turn lane, two through lanes, and a right-turn lane. The north approach consists of a left-turn lane and three through lanes, while the south approach consists of three through lanes and a yield-controlled channelized right-turn lane. Marked crossings and pedestrian signals are present at each leg of the intersection. Directional curb ramps are at all crosswalks apart from the northwest corner, which is non-directional. DWS are present only at the north crosswalks. A pedestrian refuge island is present on the intersection's southeast corner between the through lanes and channelized right turn lane from northbound University Boulevard and contains a pedestrian signal.

Coal Avenue & Yale Boulevard is a four-legged, three-way, signalized intersection. The west approach consists of a left-turn lane, two through lanes, and a right-turn lane. The north approach consists of a left-turn lane and a through lane, while the south approach consists of a through lane. Marked crossings, pedestrian signals, and DWS are present at each leg of the intersection. Directional curb ramps are present at all crosswalks apart from the southwest corner.

Coal Avenue and Girard Boulevard are a four-legged, three-way, signalized intersection. The west approach consists of two through lanes, while the north and south approaches consist of a shared through/bicycle lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection.

Coal Avenue and Carlisle Boulevard are a four-legged, three-way, signalized intersection. The west approach consists of two through lanes. The north approach consists of a left-turn lane and a through lane, while the south approach consists of a through lane. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection.

Coal Avenue and Morning Side Drive are a four-legged, three-way, stop-controlled intersection. The west approach has two through lanes, while the north and south approaches have through lanes. Marked crossings, pedestrian signals, directional curb ramps, and DWS are present at each leg of the intersection.

Study Area Segmentation

The project team approached the study corridor in three segments based on land use, roadway geometry, and volume. The segments are shown in Figure 2,

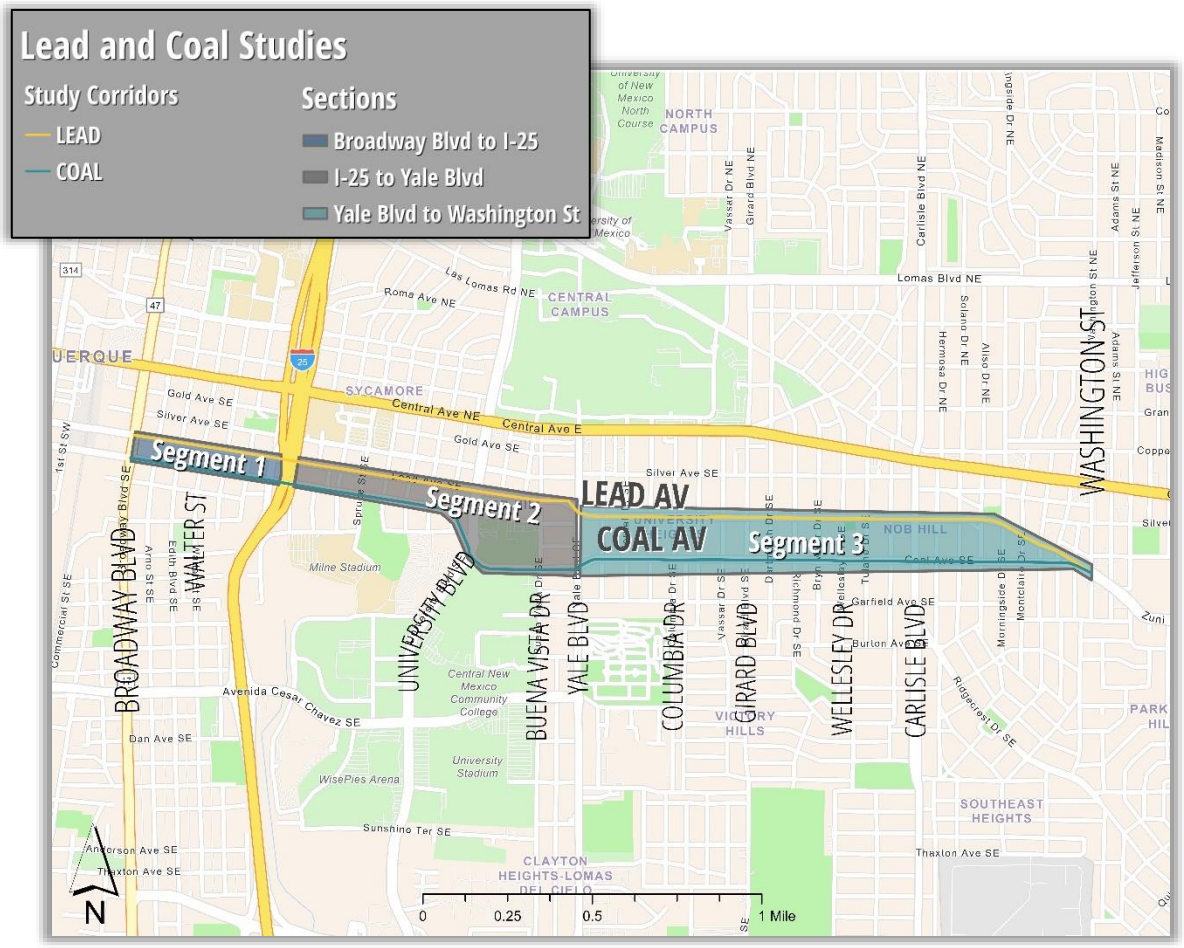


Figure 2: Study Area Segmentation

LAND USE

The study area comprises a few prominent land uses. Segment 1 abuts Low-Density Residential, Commercial Retail and Services, Multi-family, and Office primarily. Segment 2 also abuts mostly Low-Density Residential, Office, Commercial Services, Multi-family, and Educational. Segment 3 is primarily adjacent to Low-density Residential areas with some Commercial Retail, Multi-family, Commercial Services, and Offices. Figure 3 shows the adjacent land of the study area.

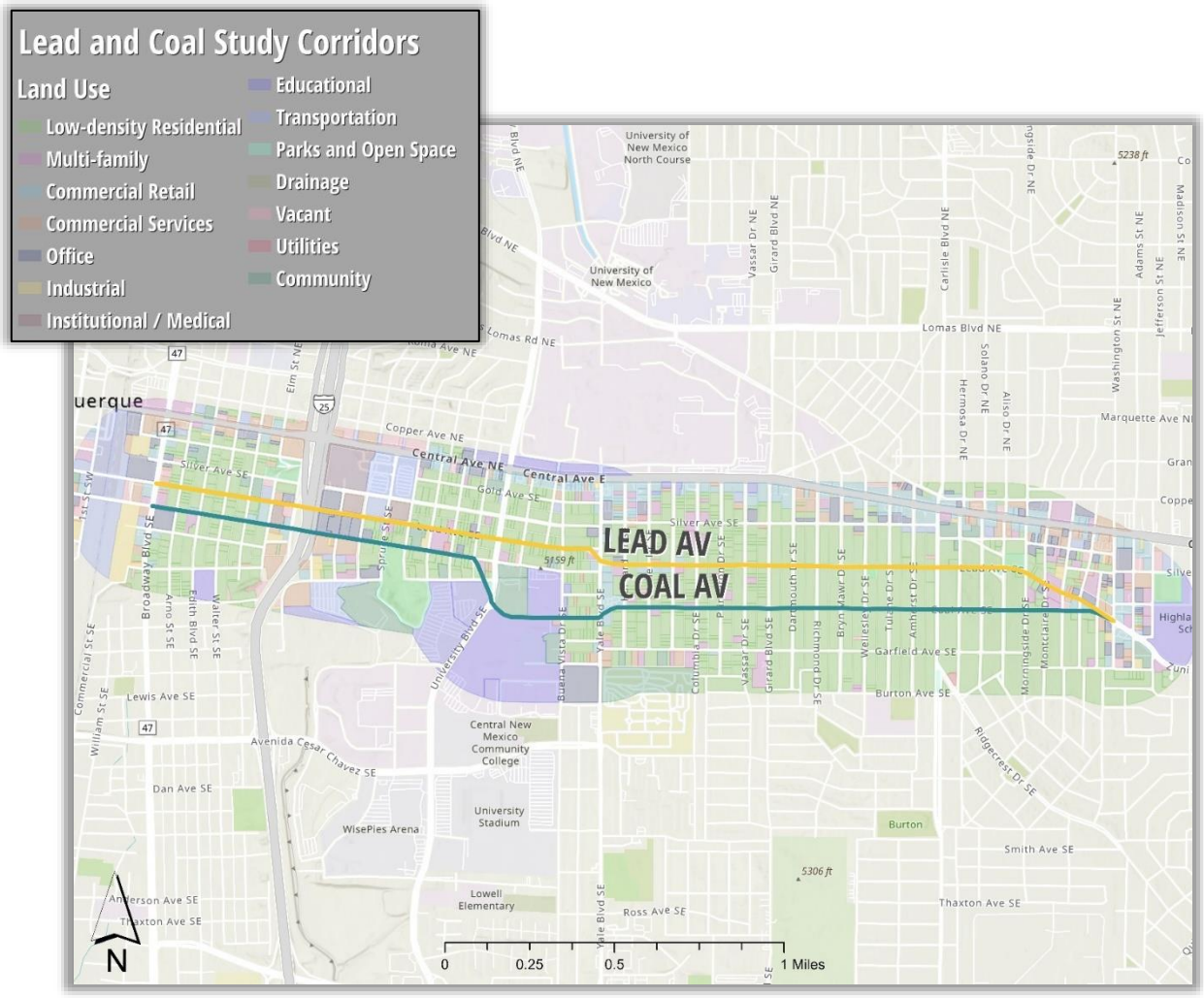


Figure 3: Study Area Adjacent Land Uses

PEDESTRIAN FACILITIES

Pedestrian facilities are currently present along the Lead and Coal corridors. The facilities include detached sidewalks, ADA ramps, crosswalks, and pedestrian push buttons at each signalized intersection. Segments also contain similar pedestrian facility characteristics, including sidewalk widths and attached or detached sidewalks.

Segment 1

Sidewalks on either side of Lead Avenue within Segment 1 are primarily 7-8 feet. The bicycle lane on the north side of Lead Avenue helps to provide a 10-foot buffer, while intermittent parking lanes on the south side of Lead Avenue provide a 9-foot buffer for pedestrians. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. No benches or pedestrian resting facilities are present.

Segment 2

Sidewalks on either side of Lead Avenue within Segment 2 are primarily 7-8 feet and detached. Buffer zones on the north side of Lead Avenue are primarily 14 feet, while buffer zones on the south side of Lead Avenue vary from 4 feet at the Yale Boulevard intersection to 8-18 feet due to intermittent parking lanes. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. There are no benches or pedestrian resting facilities within this segment apart from public transit stop locations at Mesa Street and Cedar Street.

Segment 3

Sidewalks on either side of Lead Avenue within Segment 3 are primarily 7 feet detached. Buffer zones on the north side of Lead Avenue range from 6-16 feet, though 12 feet is standard. Buffer zones on the south side of Lead Avenue vary from 2-8 feet, though 6-8 feet is standard. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. Within this 1.25-mile primarily residential segment, there are four benches for pedestrians and three transit stop locations at Yale Boulevard, Girard Boulevard, and Carlisle Boulevard, each containing a bench.

Coal Avenue Pedestrian Facilities

Segment 1

Sidewalks on either side of Coal Avenue within Segment 1 are typically 7-8 feet and attached. On the north side of Coal Avenue, frequent parking lanes ensure a 10-foot minimum buffer for pedestrians. This is also true on the south side of Coal Avenue, where a bicycle lane provides pedestrians with a 10-foot minimum buffer. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. No pedestrian resting facilities are present.

Segment 2

The 6-to-7-foot-wide sidewalks on either side of Coal Avenue within Segment 2 are nearly equally attached and detached. On the north side of Coal Avenue, pedestrian buffer zones vary from 4-25 feet due to intermittent parking lanes. On the south side of Coal Avenue, pedestrian buffer zones vary from 6-22 feet. The bicycle lane present ensures a minimum 6-foot buffer for pedestrians. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. Apart from public transit stop locations at Spruce Street and University Boulevard, no pedestrian resting facilities are present.

Segment 3

Sidewalks on either side of Coal Avenue within Segment 3 are typically 7-8 feet wide and detached. On the north side of Coul Avenue, pedestrian buffer zones vary from 0-8 feet, though 4-6 feet is most common. A

0-foot buffer zone only occurs occasionally when the sidewalks attach to the roadway in front of homes. Buffer zones on the south side of Coal Avenue range from 6-14 feet, though 6-10 feet is most common. The bicycle lane present ensures a 6-foot buffer for pedestrians as the sidewalk frequently attaches and detaches from the roadway. All crosswalks contain marked crossings and pedestrian push-buttons at signalized intersections. Within this 1.25-mile primarily residential segment, there are four benches for pedestrians and three public transit stop locations at Yale Boulevard, Girard Boulevard, and Carlisle Boulevard, each containing a bench.

Bicycle Facilities

Bicycle lanes throughout the study area are six feet wide on Lead Avenue and Coal Avenue. Exclusive turn lanes are present at Broadway Boulevard, Locust Street, Oak Street, University Boulevard, Yale Boulevard, and Washington Street; the bicycle lanes taper to four or five feet wide at these intersections. A four-foot buffer is present along the bicycle lanes from Broadway Boulevard to Locust Street.

Transit

ABQ Ride Bus Route 97 operates along Lead and Coal Ave. On Lead Avenue, bus stops are available at Broadway Boulevard, Elm Street, Cedar Street, Mesa Street, Yale Boulevard, Girard Boulevard, and Carlisle Boulevard. On Coal Avenue, bus stops are available at High Street, Mulberry Street, University Boulevard, Girard Boulevard, and Carlisle Boulevard.

DATA COLLECTION

Pneumatic Tube Counts

The project team collected pneumatic tube data in April 2024 as a separate effort. This data provided insight into traffic activity in the study corridor. Pneumatic tube counters yielded motor vehicle classifications, traffic volumes, and travel speeds. Figure 4 shows the pneumatic tube deployments. The sections that follow are a sample of the recorded data.

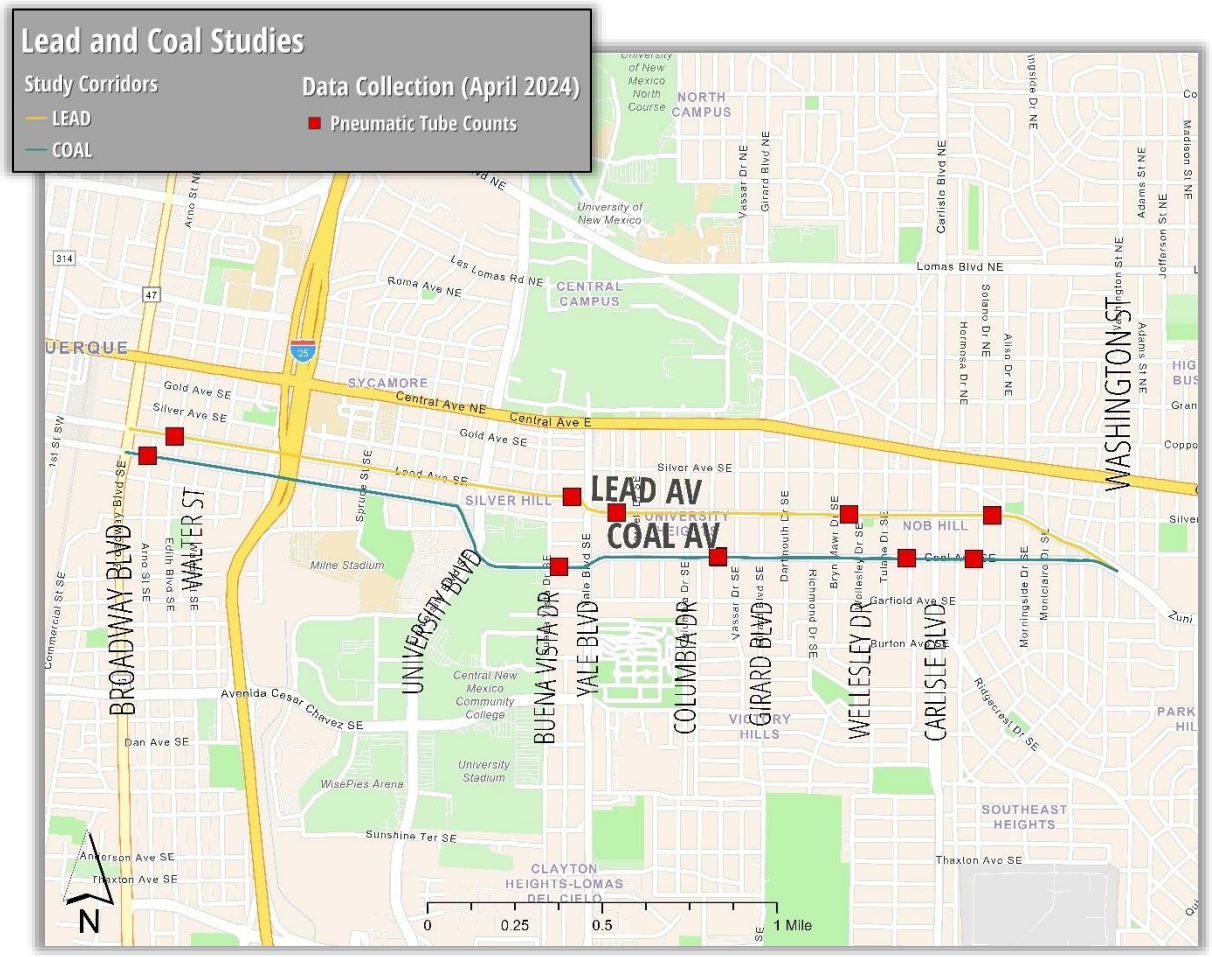


Figure 4: Pneumatic Tube Counts

Coal Avenue – West of Arno Street

Pneumatic tube counts on Coal Avenue to the West of Arno Street collected speeds and vehicle classes. Table 3 and Table 4 summarize the speed and class data.

Table 3: Coal Avenue – West of Arno Street Speed Profile

Direction	Mean Speed (MPH)	50th Percentile Speed (MPH)	85th Percentile Speed (MPH)	95th Percentile Speed (MPH)
East	31	31	36	40

Table 4: Coal Avenue – West of Arno Street Vehicle Classification Data

Direction	ADT (veh/day)	Proportion
Passenger Cars	7444	69.6%
Pickups, Panels, Vans	2046	19.1%
Single Unit 2-Axle	588	5.5%
Single Trailer <5 Axle	268	2.5%
All Others	343	3.3%

Coal Avenue – West of Amherst Drive

Pneumatic tube counts collected speeds and vehicle classes on Coal Avenue to the West of Amherst Drive. Table 5 and Table 6 summarize the speed and class data.

Table 5: Coal Avenue – West of Amherst Drive Speed Profile

Direction	Mean Speed (MPH)	50th Percentile Speed (MPH)	85th Percentile Speed (MPH)	95th Percentile Speed (MPH)
East	32	32	36	39

Table 6: Coal Avenue – West of Amherst Drive Vehicle Classification Data

Direction	ADT (veh/day)	Proportion
Passenger Cars	6367	73.8%
Pickups, Panels, Vans	1357	15.7%
Single Unit 2-Axle	492	5.7%
Single Trailer <5 Axle	219	2.5%
All Others	191	2.3%

Lead Avenue – West of Aliso Drive

Pneumatic tube counts on Lead Avenue to the West of Aliso Drive collected speeds and vehicle classes. Table 7 and Table 8 summarize the speed and class data.

Table 7: Lead Avenue – West of Aliso Drive Speed Profile

Direction	Mean Speed (MPH)	50th Percentile Speed (MPH)	85th Percentile Speed (MPH)	95th Percentile Speed (MPH)
West	31	31	35	38

Table 8: Lead Avenue – West of Aliso Drive Vehicle Classification Data

Direction	ADT (veh/day)	Proportion
Passenger Cars	6300	77.0%
Pickups, Panels, Vans	1282	15.7%
Single Unit 2-Axle	273	3.3%
Single Trailer <5 Axle	141	1.7%
All Others	183	2.3%

Lead Avenue – West of Edith Boulevard

Pneumatic tube counts on Lead Avenue to the West of Edith Boulevard collected speeds and vehicle classes. Table 9 and Table 10 summarize the speed and class data.

Table 9: Lead Avenue – West of Edith Boulevard Speed Profile

Direction	Mean Speed (MPH)	50th Percentile Speed (MPH)	85th Percentile Speed (MPH)	95th Percentile Speed (MPH)
West	33	33	38	41

Table 10: Lead Avenue – West of Edith Boulevard Vehicle Classification Data

Direction	ADT (veh/day)	Proportion
Passenger Cars	7,274	71.8%
Pickups, Panels, Vans	1713	16.9%
Single Unit 2-Axle	724	7.2%
Single Trailer <5 Axle	230	2.3%
All Others	184	1.8%

Turning Movement Counts

Turning movement counts for the study intersections were collected for three periods: 6:00 AM to 9:00 AM, 11:00 AM to 2:00 PM, and 3:30 PM to 6:30 PM, in May and June 2024. Turning movement volumes collected at the study intersections show a typical commuter-type distribution with observable AM, MD, and PM peak hours. The peak hours for the entire study area (network peak) are 7:30 AM – 8:30 AM, 12:00 PM to 1:00 PM, and 4:30 PM to 5:30 PM. Figure 5 shows the observed peak hours for each intersection where traffic counts were collected and the peak hours for the entire study area (network peak). Complete turning movement counts can be found in Appendix C. A summary of peak hours by intersection can be found in Appendix B.

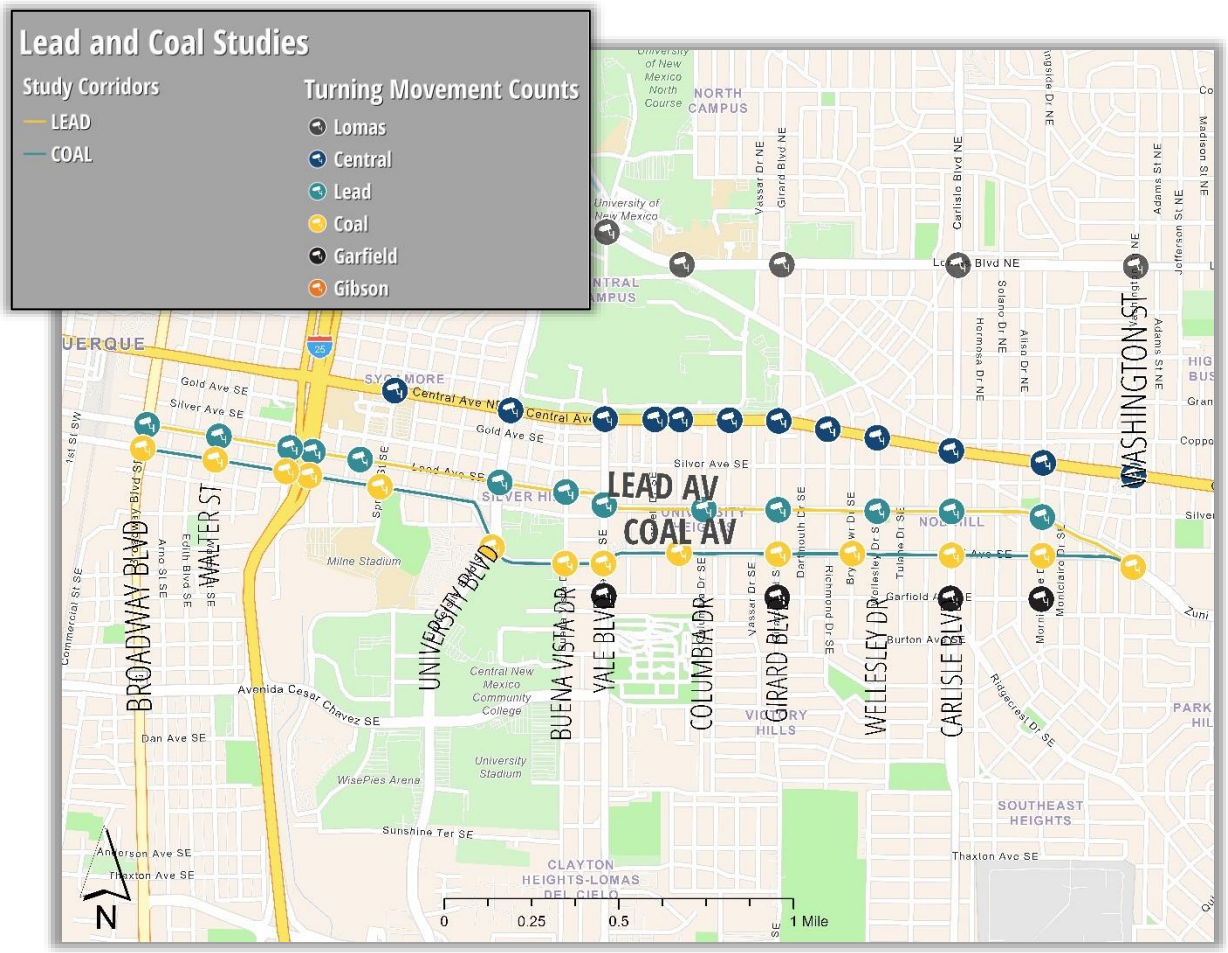


Figure 5: Turning Movement Counts

SAFETY ASSESSMENT

Crash Data Limitations

Crash data is extracted from reports filed with or by law enforcement agencies and is subject to variations in reporting based on the officer's interpretation of the Uniform Crash Report (UCR). Known challenges with crash data include excluding crashes below property damage thresholds, unreported crashes, near-misses, and geolocation accuracy.

Crash Analysis

This study analyzed five years of crashes occurring in the study corridor between 2018 and 2022 provided by the City of Albuquerque. This crash dataset is the most recent available and contains 1,475 crashes: 751 on Lead and 724 on Coal. Figure 6 shows a heat map of the reported crashes in the study corridors.

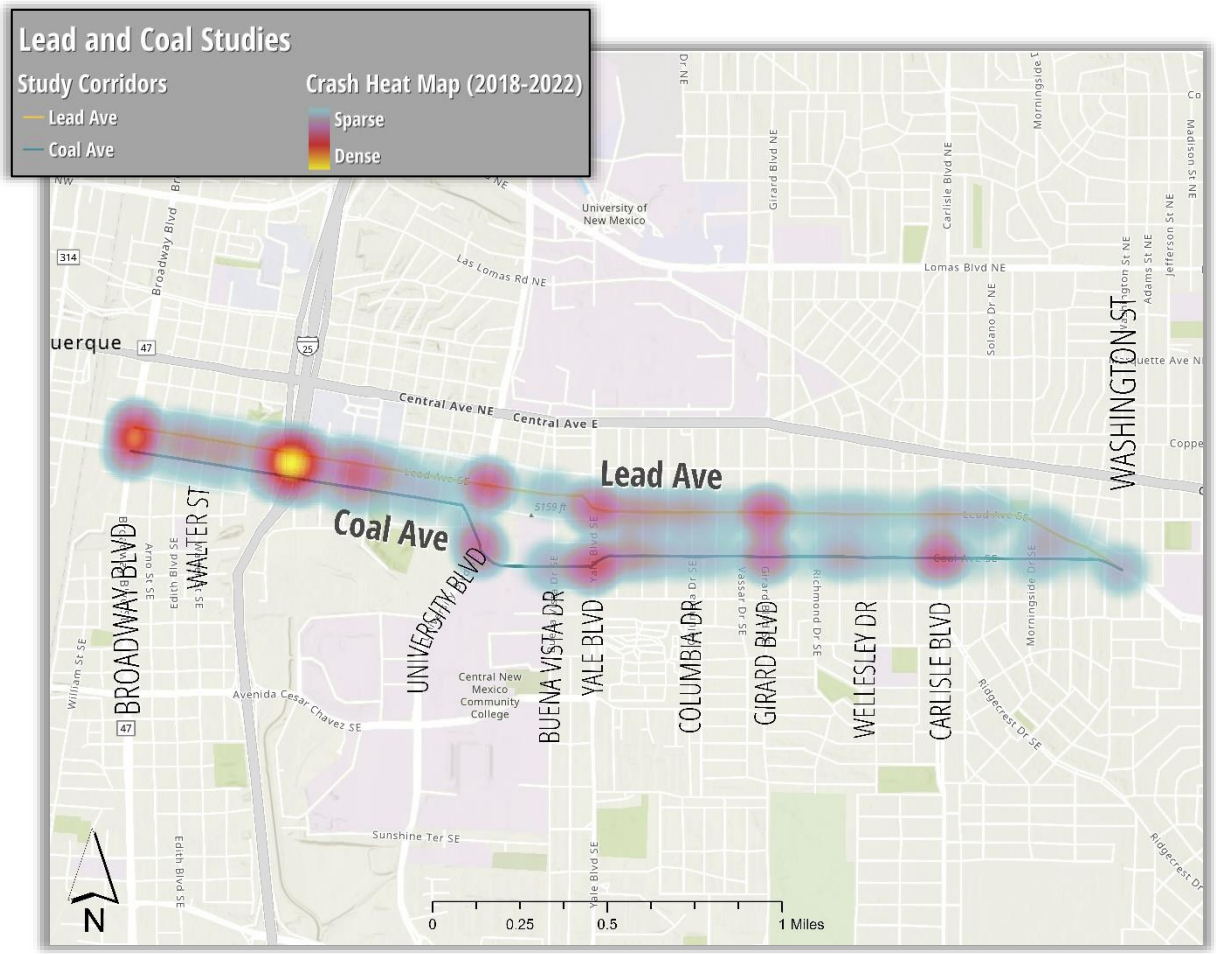


Figure 6: Lead & Coal Crash Heat Map (N=1,475), 2018-2022

Severity

The KABCO scale classifies the severity of crashes in New Mexico. The letters in KABCO represent the severity of a crash:

- K – Killed (Fatal)
- A – Incapacitated (Serious Injury)
- B – Minor Injury
- C – Complaint of Injury (Suspected Injury)
- O – No Apparent Injury (Property Damage Only)

This study reviewed five years of crash data. During that time, there were 1,475 crashes; five were Fatal (K), 19 resulted in Serious Injuries (A), and 1,451 crashes resulted in Minor Injuries (B), Suspected Injuries (C), or Property Damage Only (O). Four fatal crashes occurred on Lead and one on Coal. Three Fatal crashes involved pedestrians, and one involved a motorcycle. Additionally, three bicyclist-involved crashes resulted in Serious Injuries. Figure 7 illustrates the crashes in the study area by location and severity.

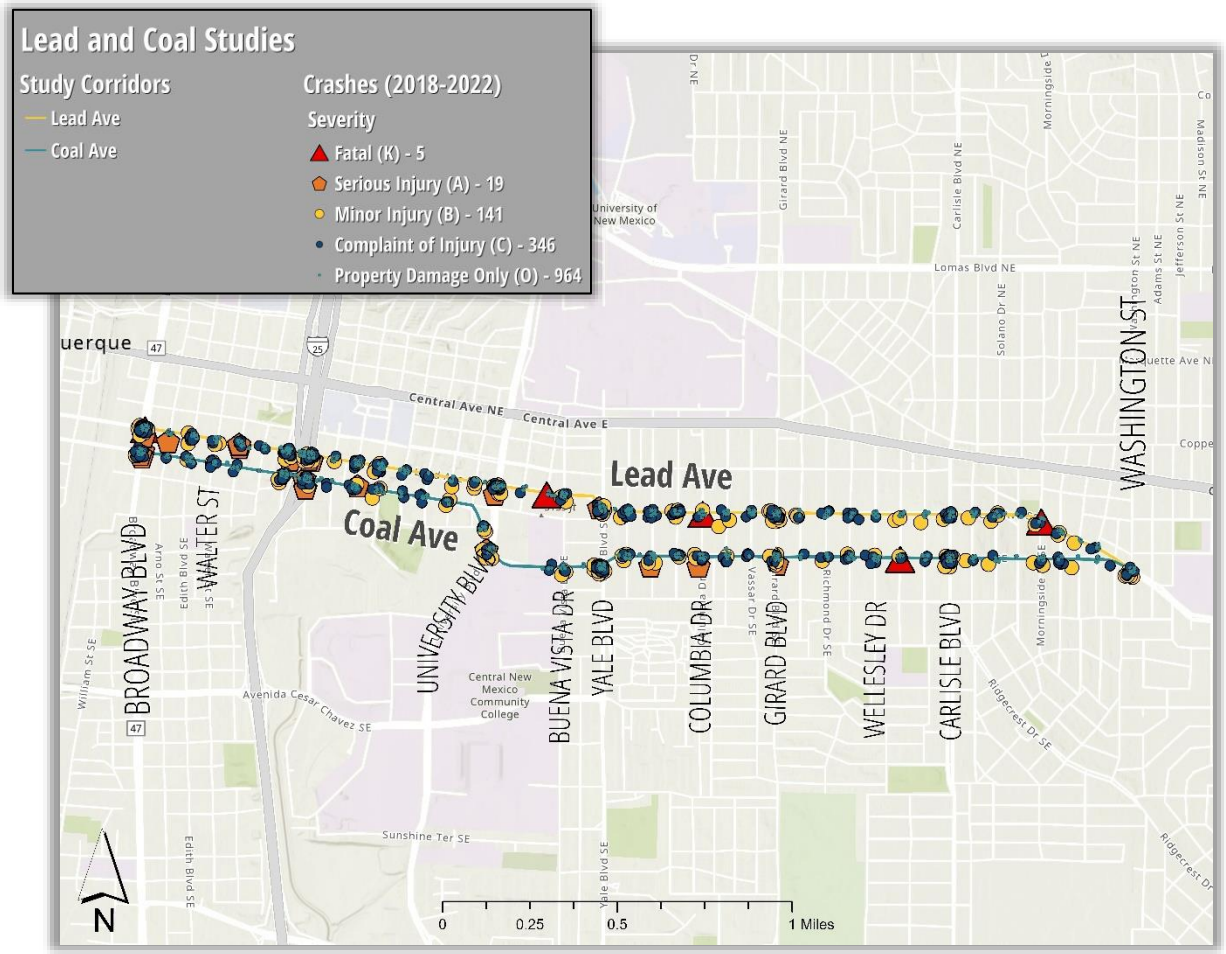


Figure 7: Crashes by Severity (N=1,475), 2018-2022

Crash Rates Comparison

Comparing crash rates across similar facilities provides valuable insights into safety challenges, establishes performance benchmarks, and identifies crash patterns. Since facility types vary in traffic volumes, design, and usage, normalizing crash rates ensures accurate comparisons. These comparisons can aid decision-makers in allocating resources by prioritizing locations with significantly higher crash rates than their peers.

Lead and Coal Avenues are unique in that they are one-way couplets and principal arterials, meaning that they are designed to provide a high level of mobility, serve major activity centers, and carry high vehicle capacities that enter and leave an area. The project team looked for similar facilities based on functional class, facility type, posted speed limit, and traffic volumes. The comparison corridors all have a functional class of principal arterial. However, two are one-way couplets, and the others allow two-way traffic. Table 11 shows the attributes of Lead and Coal Avenues and four comparison corridors. The crash rate comparison of the study corridors to roads with similar attributes proved futile and did not represent the residents' lived experience.

Table 11: Crash Rate Comparison Corridors

	Lead/Coal Aves	2nd/3rd Sts	Lohman/Amador Aves (Las Cruces)	Broadway Blvd	Unser Blvd
Functional Class	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial	Principal Arterial
Facility Type	One-way Couplet	One-way Couplet	One-way Couplet	Two-way	Two-way
Speed Limit	30 MPH	35 MPH	35 MPH	35 - 40 MPH	25 - 40 MPH
Traffic Volume	7,096-11,812 (one-way)	3,523-6,179 (one-way)	5,033-15,492 (one-way)	11, 108–22,201 (Bidirectional)	10,224–21,985 (Bidirectional)
Travel Lanes (Each Direction)	2	2	4	2	2
N/E Extent	Washington St	Indian School Rd	Lujan St	Iron Ave	Bridge Blvd
S/W Extent	Broadway Blvd	Lomas Blvd	Miranda St	Woodward Rd	Dennis Chavez Blvd
Length (mi.)	2.90, 2.97	1.01, 1.03	1.24, 1.24	2.14	3.38

Signalized Intersections

This study compared crash rates for signalized intersections and various crash types across each road segment. For signalized intersections, the project team determined crash rates for all crash types by calculating the crash rate for the number of crashes per million entering vehicles described in the following equation:

$$MEV = \frac{C * 1{,}000{,}000}{V * N * 365}$$

Where:

$C = Number\ of\ crashes\ in\ the\ study\ period$

$V = Traffic\ volume\ entering\ the\ intersection\ daily\ (AADT)$

$N = Number\ of\ years\ of\ data$

This rate represents the number of crashes occurring at an intersection per one million vehicles that enter over a specified period; in this study, we use five years of crash and traffic data. Table 12 summarizes the average intersection crash rate for each corridor.

Table 12: Average Signalized Intersection Crash Rates

	Lohman/Amador Aves (Las Cruces)	2nd/3rd St.	Lead/Coal Aves	Unser Blvd	Broadway Blvd
Signalized Intersection (MEV)	1.6	1.56	1.46	1.38	1.22

Road Segments

For road segments, the project team determined crash rates for speed-involved crashes, crashes identified as occurring Off-Roadway, and Fixed Object crashes by calculating the crash rate for the number of crashes per 100 million vehicle miles traveled described in the following equation:

$$100MVMT = \frac{C * 100{,}000{,}000}{365 * V * N * L}$$

Where:

$C = Number\ of\ crashes\ in\ the\ study\ period$
$V = Traffic\ volume\ entering\ the\ intersection\ daily\ (AADT)$
$N = Number\ of\ years\ of\ data$
$L = Length\ of\ the\ road\ segment\ in\ miles$

Speed-involved crashes are those in which the crash report identifies "Excessive Speed," "Speed Too Fast for Conditions," or "High-Speed Pursuit" as contributing factors. Crashes occurring "Off-Roadway" are identified by the variable "First Harmful Event Occurrence" with the attribute "Off-Roadway." This variable identifies the location of where the crash occurred in, whether it occurred on the road or off the roadway, i.e., shoulder, median, roadside, sidewalk, etc. Fixed object crashes comprise crashes in which the "Crash Analysis" variable indicates the collision occurred with a Parked Vehicle, Light Pole, Building, Traffic Signal, Fence, Median/Curb, or Signpost, or the crash was a Rollover. The Lead and Coal corridors fall in the middle of the pack for speed-involved and fixed object crash rates and have the second lowest crash rate for crashes where the First Harmful Event occurs off the roadway.

Table 13: Segment Crash Rates

	2nd/3rd St.	Broadway Blvd	Lead/Coal Aves	Lohman/Amador Aves (Las Cruces)	Unser Blvd
Speed-Involved Crashes (100 MVMT)	46.95	19.41	10.26	8.81	8.28
FHE - Occurrence: Off-Roadway (100 MVMT)	7.82	4.53	2.84	3.20	1.26
Fixed Object Crashes (100 MVMT)	36.52	8.41	7.89	5.20	6.66

Crash Rate Comparison Summary

The crash rate comparison indicated that Lead and Coal Avenues did not indicate a significant problem compared to similar corridors. However, similar is a relative statement since Lead and Coal Avenues are unusual in that they abut many residences. As such, the project team assessed crashes exclusively within the Lead and Coal corridors. The following sections explore crashes on Lead and Coal Avenues.

Year

Crashes were at their highest in 2018 and slightly dipped in 2019. Between 2019 and 2020, a 30% decrease was realized, likely resulting from the impacts of travel and driver behavior caused by COVID-19. Crashes began to increase again in 2021 and fell in 2022, although there were still more crashes than in 2020. Figure 8 shows crashes per year between 2018 and 2022.

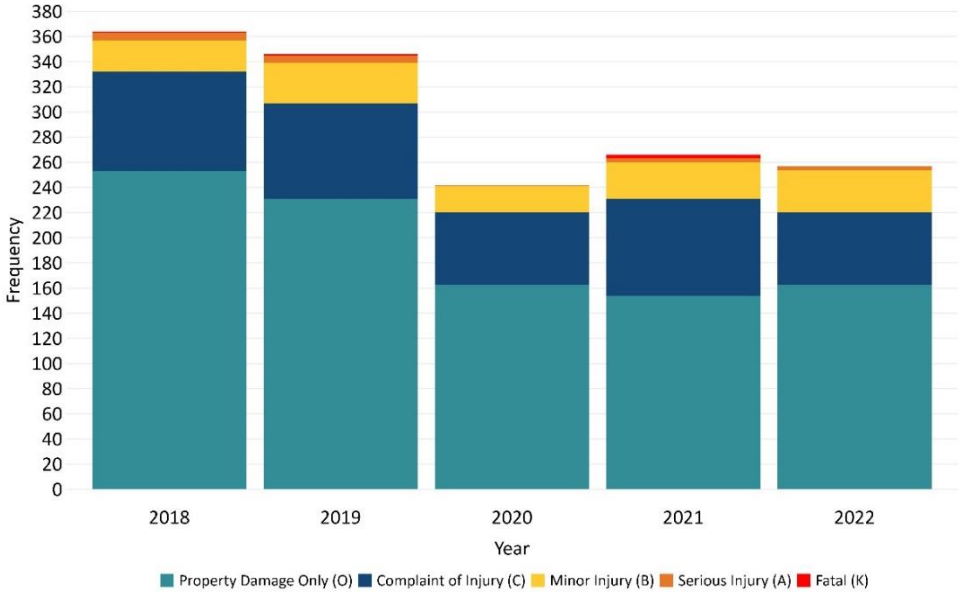


Figure 8: Crashes per Year, 2018-2022

Month

Crash frequency is highest in August but gradually declines through December. January through July experiences fluctuation in crashes with peaks in March and June. Fatal crashes occurred from October through December, peaking in November. Monthly crash trends by corridor echo the aggregated crash trends in Figure 9.

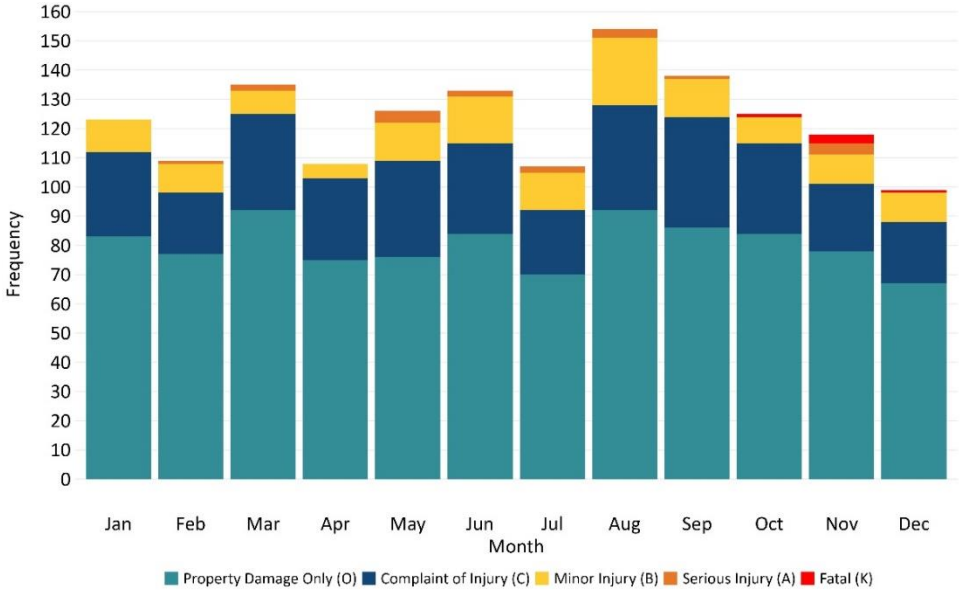


Figure 9: Crash Severity by Month, 2018-2022

Day of Week

Crash frequency increases from Sunday through Saturday, with most occurring on Friday. Crashes are relatively consistent between Tuesday and Friday. Fewer crashes on Sunday and Monday suggest less traffic. Additionally, crash severity proportions are consistent throughout the week, but the proportion of Minor Injuries, Serious Injuries, and Fatalities is highest on the weekend. Figure 10 shows crashes and severity by day of the week.

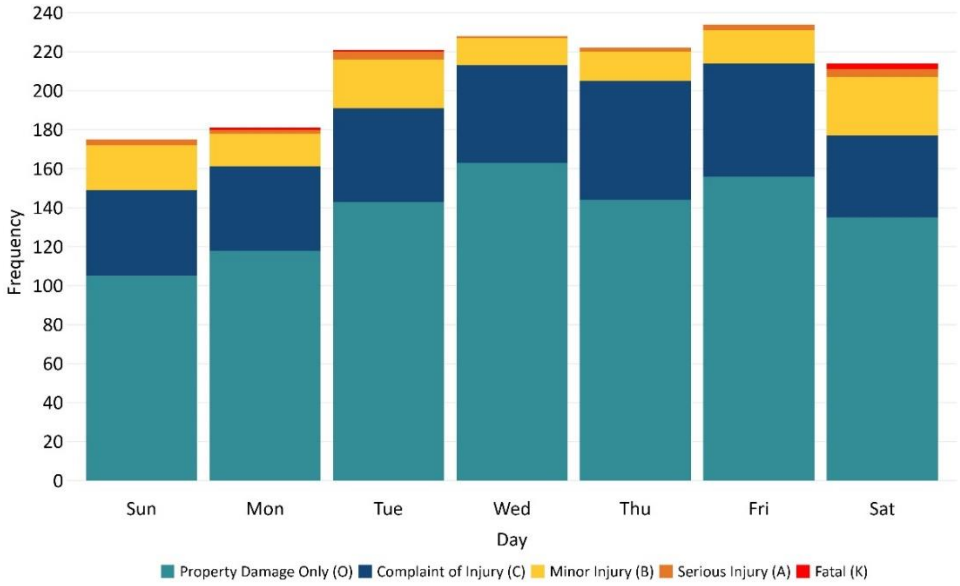


Figure 10: Crash Severity by Day of the Week, 2018-2022

Time of Day

The crash frequency per hour echoes daily traffic, increasing with traffic volume. Crashes are lowest between 12:00 AM and 5:00 AM. Crashes increase significantly after 6:00 AM, peaking between 11:00 AM and Noon. An afternoon peak occurs from 3:00 PM to 5:00 PM. After 6:00 PM, crashes decrease through midnight. The AM peak is primarily concentrated around 11:00 AM, while the afternoon peak spans from 3:00 PM to 5:00 PM. Figure 11 highlights how crash frequency tends to increase during peak traffic hours.

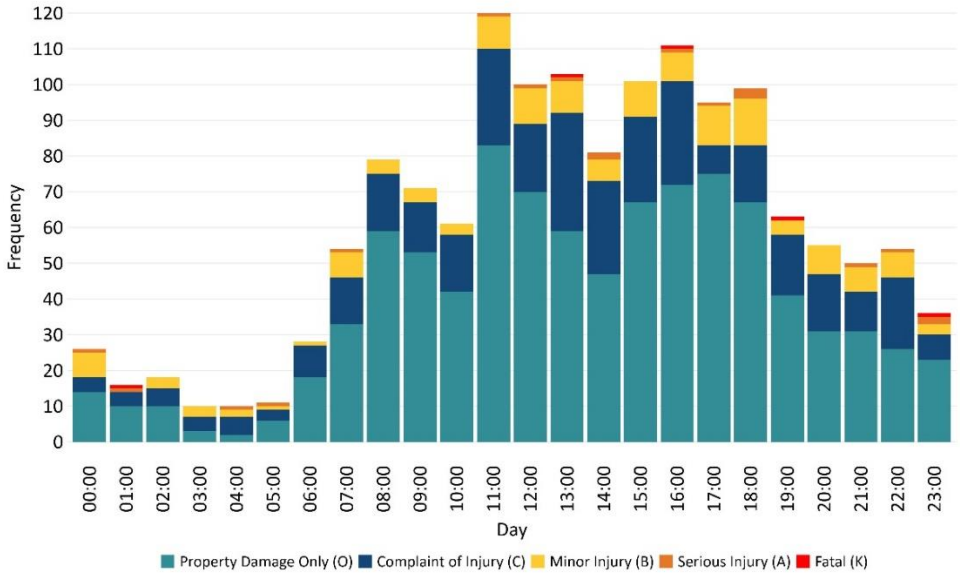


Figure 11: Crash Severity by the Time of Day, 2018-2022

Lighting Condition

Most crashes (~87%) occur under Daylight or Dark-Lighted conditions. These trends suggest that inadequate lighting is not a significant contributor to crashes of Lead or Coal. Figure 12 is a proportional bar chart summarizing crashes by lighting condition.

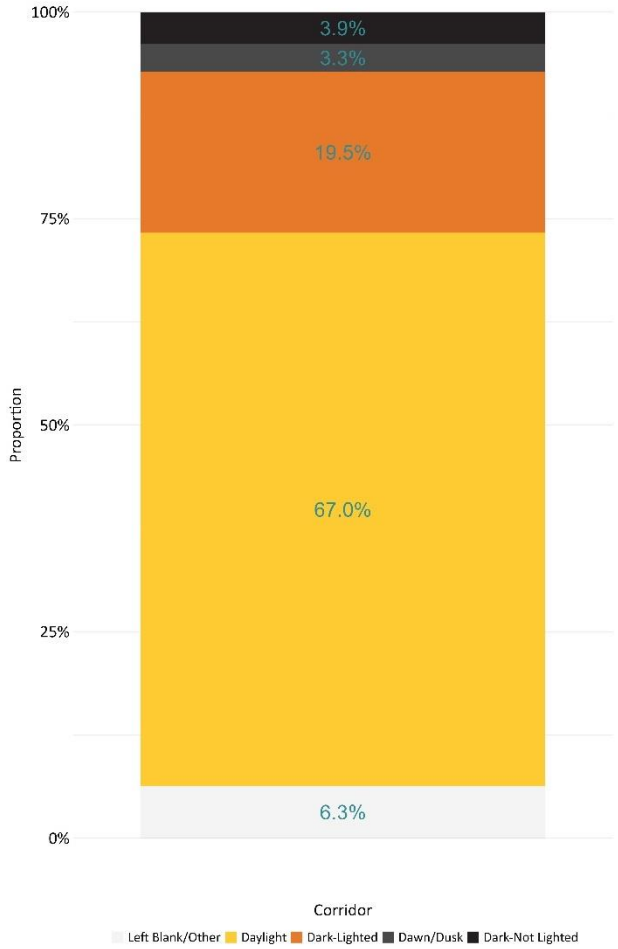


Figure 12: Crash Proportions by Lighting Condition

Signalized Intersection Crash Rates

Crash rates per MEV for all crash types are calculated for significant intersections in the study corridors. The intersections with the highest crash rates are Coal Avenue and Carlisle Boulevard, Lead Avenue and Girard Boulevard, and both Oak Street intersections. Other notable intersections are Yale, Lead Avenue, and University Boulevard. Figure 13 shows the intersection crash rates for significant Lead and Coal Avenues intersections.

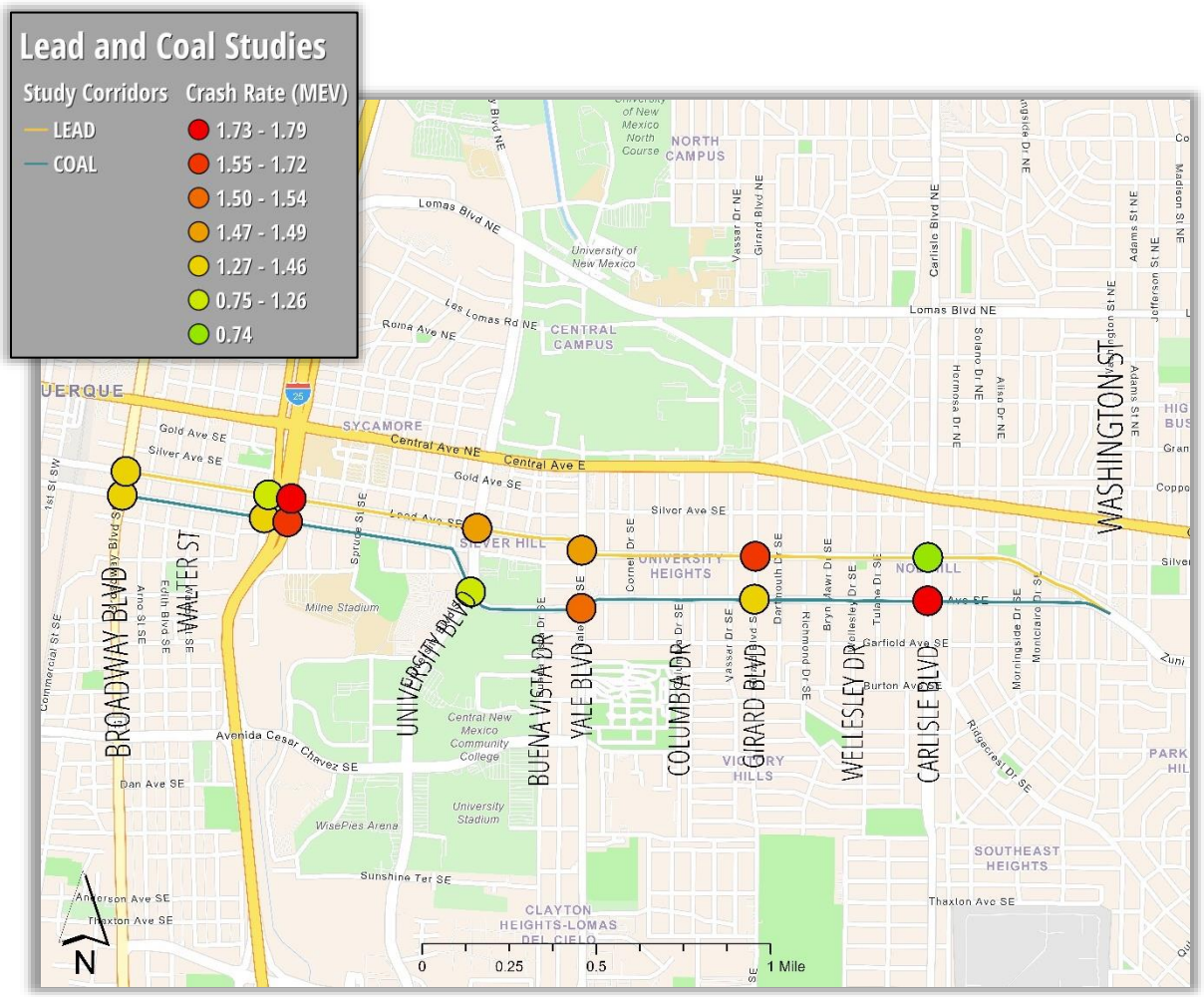


Figure 13: Signalized Intersection Crash Rates for Lead and Coal Avenues

Speed-Involved Crashes

Speed is a factor in crashes that directly affects crash severity. The kinetic energy of a vehicle of mass (m) traveling at speed (v) is 1/2mv2, meaning that higher speeds lead to much more significant impact forces, increasing the risk of fatal and severe injury crashes. Managing speed is critical to eliminating severe crash outcomes. Speed-related crashes are interpreted as crashes in which the contributing factor is reported as "Excessive Speed," "*High-Speed Pursuit,"* or *"Speed Too Fast for Conditions."* However, speed may not be attributed to every crash where it was a contributing factor. Speed contributes to nearly nine percent of crashes in the study area. This dataset indicates that speed contributed to one fatal and four serious injury crashes. Figure 14 shows the locations of speed-involved crashes in the study corridors.

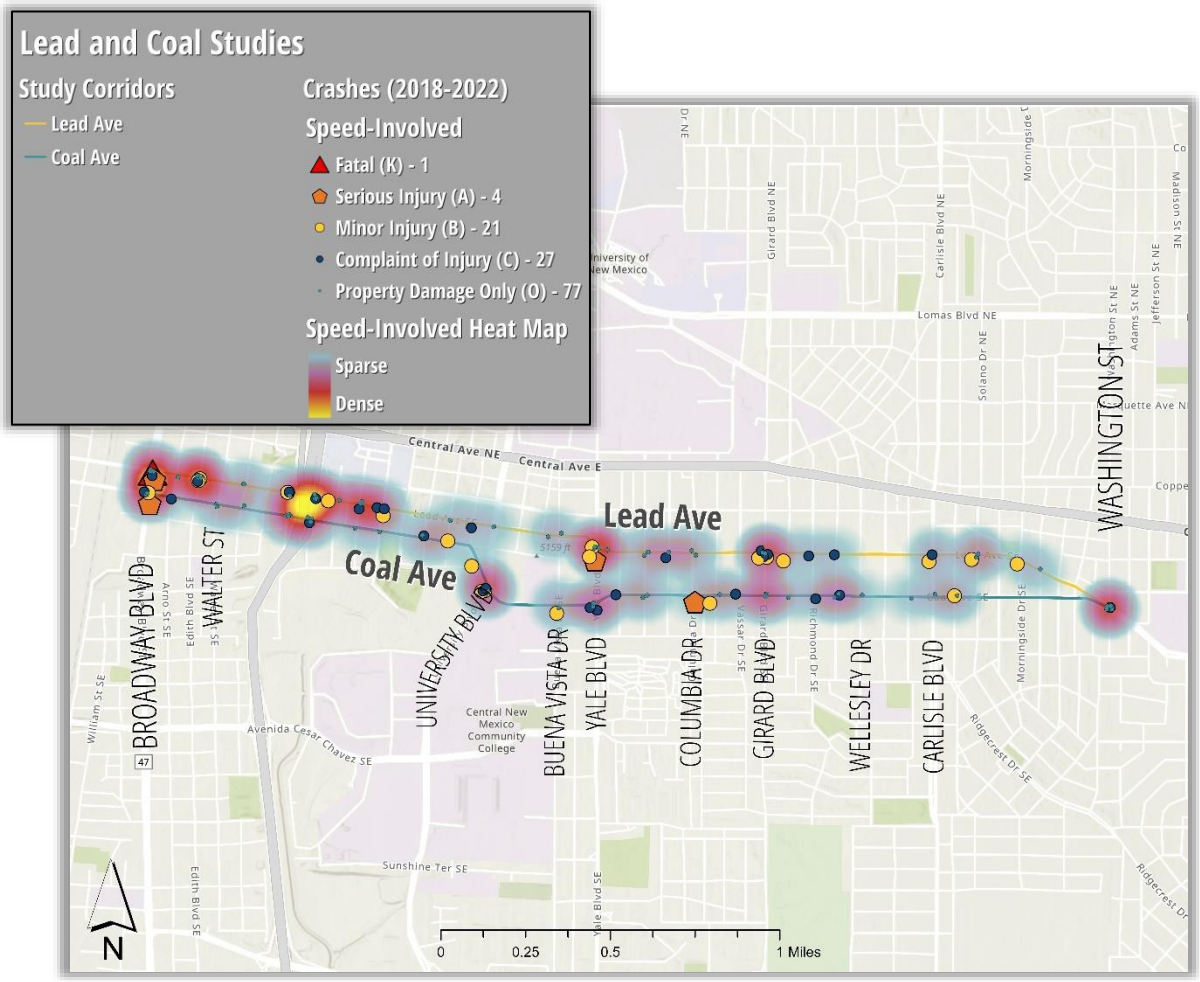


Figure 14: Speed-involved Crashes Heat Map, 2018-2022

Multimodal Crashes

Pedestrians, bicyclists, and other vulnerable road users are subject to more significant consequences when involved in a motor vehicle crash. Figure 15 is a proportional bar chart showing the proportion of transportation mode involvement by crash severity.

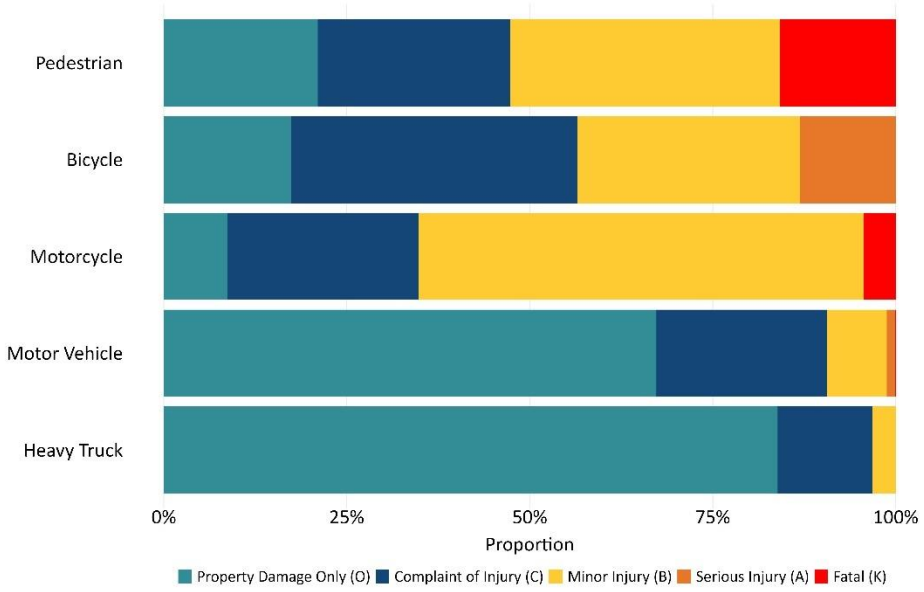


Figure 15: Proportion of Crash Severity by Mode of Transportation, 2018-2022

Manner of Impact

A crash's reported Manner of Impact regarding the First Harmful Event describes how the road users collided. Documenting the Manner of Impact of the First Harmful Event was introduced in 2020 on New Mexico's Uniform Crash Report. Our crash data spans from 2018 to 2022. Crashes before 2020 did not have this data reported, so the proportion of Left Blank/Other is sizeable. Of the crashes containing this data, Front-to-Rear crashes, rear-end collisions, and Front-to-Side crashes, or T-bone crashes, are the most common. Figure 16 summarizes the number of crashes by manner of impact.

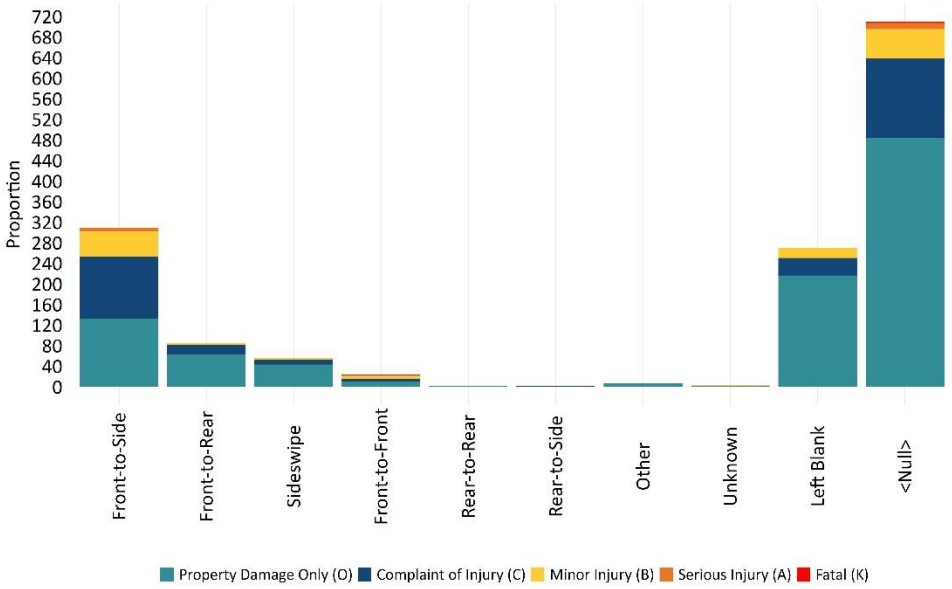


Figure 16: Crash Severity by First Harmful Event – Manner of Impact, 2018-2022

Alcohol Involvement

Alcohol impairs a driver's reaction time, judgment, and coordination, increasing a crash's likelihood and severity. On Lead and Coal Avenues, alcohol-involved crashes comprise 3.5% of all crashes in the corridors. However, alcohol-involvement comprises 16.7% of Fatal and Serious Injury crashes. While alcohol is disproportionately represented in the most severe crashes on Lead and Coal Avenues, this proportion is in line with the proportion of all alcohol-involved crashes resulting in Fatal and Serious Injuries in Bernalillo County. Table 14 summarizes alcohol involvement by crash severity for the study corridors and Bernalillo County.

Table 14: Alcohol involvement by crash severity

	Lead & Coal			Bernalillo County		
	Alcohol Involved	Total	Proportion	Alcohol Involved	Total	Proportion
Fatal (K)	1	5	20.0%	203	529	38.4%
Serious Injury (A)	3	19	15.8%	115	1,352	8.5%
Fatal (K) & Serious Injury (A)	4	24	16.7%	318	1,881	16.9%
Minor Injury (B)	12	141	8.5%	554	7,300	7.6%
Complaint of Injury (C)	10	346	2.9%	702	17,304	4.1%
Property Damage Only (O)	26	964	2.7%	1,733	57,173	3.0%
Total	52	1,475	3.5%	3,307	83,658	4.0%

Crash Summary

Between 2018 and 2022, crash trends fluctuated, peaking in 2018 before dipping in 2019, followed by a 30% decline in 2020, likely due to COVID-19-related travel behavior changes. August has the highest crash frequency, with peaks in March and June, while fatal crashes peak in November. Crashes increase throughout the week, peaking on Fridays, though severe and fatal crashes are most common on Saturdays. The highest crash rates occurred at Coal Ave & Carlisle Blvd, Lead Ave & Girard Blvd, and both Oak St intersections. Crash frequency mirrors daily traffic patterns, with peaks between 11:00 AM - 12:00 PM and 3:00 PM - 5:00 PM. Most crashes occurred in daylight or well-lit conditions. Speed was a factor in approximately 9% of crashes and resulted in one fatal and four serious injury incidents. Rear-end and T-bone collisions were the most common impact types from the Manner of Impact data, but this data does not represent most of the dataset. Alcohol contributes to 3.5% of crashes in the study corridors and to nearly 17% of Fatal and Serious Injury crashes. Additionally, vulnerable road users like pedestrians and bicyclists experience disproportionate crash severity.

Crash Reports

The crash data analysis provided insight into Lead and Coal's challenges. However, feedback from the working group and the first public meeting indicated that this data was not representative of the crashes that residents were experiencing. The project team reviewed crash reports from the corridors that occurred in 2023 and 2024, intending to gain a better understanding of the written police reports. Some emerging trends were crashes involving vehicles moving at high speeds, Red Light Running, and Left turns from the right lane and vice versa. The crash diagram in Figure 17 shows a vehicle turning left from the right lane.

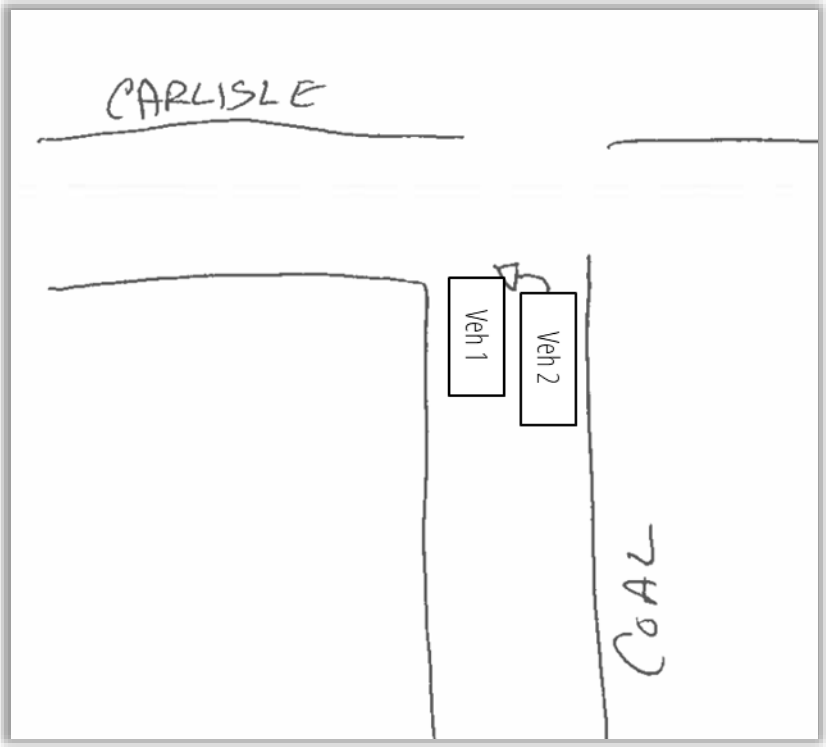


Figure 17: Crash Diagram of Vehicle Making Left Turn from the Right Lane.

Predictive Crash Method

Using the Highway Safety Software (HSS), crash prediction evaluations were performed for the study corridors. Table 15 and Table 16 compare the observed, expected, and predicted crash rates for Lead and Coal Avenues. **Observed** crashes are the historical crashes documented in this study's crash data between 2018 and 2022. The Predictive Method from the Highway Safety Manual (HSM) uses the geometric and safety features of each intersection or facility to calculate a Safety Performance Function (SPF) Crash Modification Factors (CMF) to estimate a **predicted** crash frequency. Additionally, HSS uses an Empirical Bayes analysis that combines the observed crash frequencies with the predicted crash frequencies from similar sites to estimate the **expected** crash frequency. The predicted and expected crash frequencies can then be compared to the observed annual crashes to identify areas experiencing safety issues. Complete reports for both sections from the HSS software can be found in Appendix F.

New Mexico has lower thresholds for reporting property damage-only crashes at $500 compared to other states, such as $1000 in Texas, which may contribute to high crash reporting and, thus, a high expected crash rate. New Mexico may have higher reporting rates for property damage-only crashes, higher crash frequencies, or a combination of both. Additionally, the segment analyses aggregate crashes from stop-controlled minor streets and signal-controlled intersections where traffic volume data is unavailable.

The key takeaway from Table 15 and Table 16 is the observed crash rate exceeds the Predicted and Expected crash rates for Lead and Coal Avenues at every intersection and segment analyzed.

Table 15: HSS Analysis Results for Lead Ave

Street	Section Type	Location	Observed Crash Rate (Crashes/year)	Predicted Crash Rate (Crashes/ year)	Expected Crash Rate (Crashes/year)
Lead	Intersections	Lead & Carlisle	4.2	2.6	3.4
		Lead & Girard	11.0	2.6	0.7
		Lead & Yale	9.6	3.3	7.9
		Lead & University	11.0	4.4	9.5
		Lead and Oak	12.6	3.4	10.1
		Lead and Locust	7.8	3.5	6.4
		Lead & Broadway	12.4	3.8	10.0
	Segments	Washington to Carlisle	11.6	3.3	4.7
		Carlisle to Girard	10.6	2.8	4.2
		Girard to Yale	20.8	3.6	7.3
		Yale to University	4.8	2.1	2.6
		University to Oak	18.4	3.9	7.2
		Oak to Locust	1.6	0.3	0.5
		Locust to Broadway	13.8	2.7	4.9

Table 16: HSS Analysis Results for Coal Ave

Street	Section Type	Location	Observed Crash Rate (Crashes/year)	Predicted Crash Rate (Crashes/ year)	Expected Crash Rate (Crashes/year)
Coal	Intersections	Coal & Broadway	9.8	3.4	7.9
		Coal & Locust	7.2	2.5	5.7
		Coal & Oak	9.8	2.6	7.6
		Coal & University	9.2	4.4	8.4
		Coal & Yale	11.8	3.4	9.5
		Coal & Girard	9.0	2.6	7.1
		Coal & Carlisle	11.0	2.6	8.2
	Segments	Broadway to Locust	7.8	2.5	3.5
		Locust to Oak	0.8	0.4	0.5
		Oak to University	17.4	4.5	7.4
		University to Yale	5.4	1.6	2.1
		Yale to Girard	17.2	3.1	5.9
		Girard to Carlisle	12.0	3.0	4.6
		Carlisle to Washington	8.0	3.1	3.8

PUBLIC ENGAGEMENT

Throughout the project, Lee Engineering engaged with the public in several ways to ensure interested parties could provide information and receive progress updates. Progress updates were provided via a Working Group, a Task Force, and Public Meetings with corresponding comment forms.

WORKING GROUP

The City of Albuquerque and the Lead and Coal residents initially formed the Working Group to ensure a direct connection to Mayor Tim Keller and his team. This allowed Mayor Keller and his team to discuss the project and other Lead and Coal corridor topics with the residents. Meetings with the Working Group were held once a month.

TASK FORCE

The City of Albuquerque and the Lead and Coal residents developed a taskforce team to track project progress and provide support for public engagement. This team has ensured the continuation of the Lead and Coal improvements and obtained funding for the study's completion. Residents in the Task Force also provided insight into their experiences on the Lead and Coal corridors. Meetings with the Task Force were held bi-weekly over Zoom.

PUBLIC MEETINGS

The Lead and Coal Studies Task Force hosted three public meetings to update interested parties and gather insight from residents. Meetings were held at the Heights Community Center from 6:00 PM to 8:00 PM on September 5, 2024, November 14, 2024, and December 18, 2024. Food and drink were provided for attendees. Public meeting fliers were distributed via Task Force and City Council members. The first two meetings included progress updates and discussions of the methodologies used for analysis. The third meeting provided the analysis results, cost estimates, and implementation options for the alternative design options.

Figure 18: Public Meeting #1

Public Comments

Survey Forms

During the public meetings, attendees could provide feedback via a physical survey form. These forms included a box for input and a QR code for an online survey. Figure 19 shows the in-person survey form from the third public meeting. Four written responses were received from all three public meetings. All public comments can be found in Appendix D.

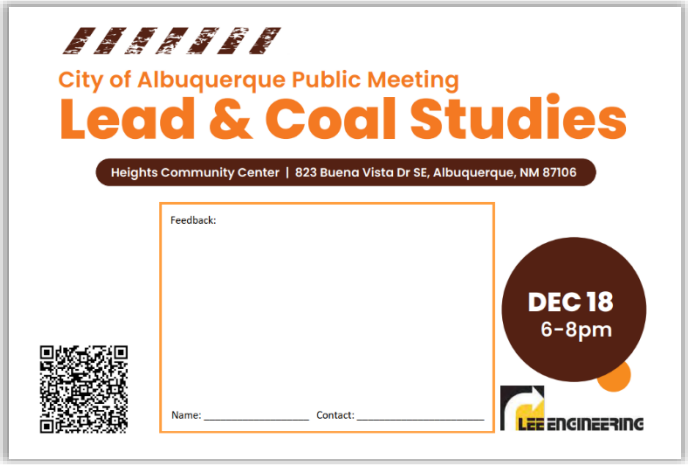


Figure 19: In-Person Survey Form

Online Survey

An online form was also available for all three public meetings, and attendees were provided a hard copy. Attendees were also encouraged to invite their neighbors to fill out the forms if they could not attend.

Each survey included questions that allowed residents to critique the presentation and provide feedback on the study's progress. Some residents also elected to provide their contact information to receive future updates and presentation materials.

Public Meeting 1

The survey from Public Meeting 1 received three online responses. Respondents expressed their confusion with the material presented. One respondent felt the comparisons were flawed and that some should be discarded. They also expressed that more qualitative data should be used to make decisions. Some respondents also expressed concerns about developments along the corridors.

Public Meeting 2

The survey from Public Meeting 2 received 11 online responses. Respondents expressed discontent with the colors of the materials. They expressed the contrast between the slide colors, and the lighting in the room made it difficult to see. Many respondents discussed safety issues they've witnessed, and several preferred the single-lane operation. Some respondents opposed the single-lane operation and were concerned about the impact on Garfield Avenue.

Public Meeting 3

The survey from Public Meeting 3 received four online responses. The responses had mixed opinions on the single-lane operation. One respondent felt the single-lane option would eliminate drag racing and property damage from crashes and reduce speed. Another respondent opposes the single-lane operation as it would delay their business operations. Similarly, a respondent opposed the two-way operation as they perceived it would create congestion and unsafe turning maneuvers.

CORRIDOR SAFETY ALTERNATIVES

Lee Engineering analyzed three safety alternatives for the Lead and Coal Corridors. These alternatives included reducing the posted speed limit, operating single-lane roads, and converting Lead and Coal Avenues to bidirectional roads.

Lee Engineering conducted a segmented analysis to identify areas where alternative design options may be more beneficial. As discussed earlier in this report and shown in Figure 2, the corridors were split into three segments based on the adjacent land use, roadway geometry, and traffic volumes. The Lead and Coal corridors were segmented in the following manner:

- Segment 1: Broadway Boulevard to Interstate 25
- Segment 2: Interstate 25 to Yale Boulevard
- Segment 3: Yale Boulevard to Washington Street

POSTED SPEED LIMIT SPEED REDUCTION

A speed reduction along the Lead and Coal corridors will involve reducing the speed to 25 MPH and installing regulatory signage to increase driver awareness. Currently, the signals on the Lead and Coal corridors are timed for 30 MPH and would need to be retimed for 25 MPH by a licensed Professional Traffic Operations Engineer (PTOE). Figure 20 is a rendering of the existing typical section. This rendering is based on the block of Lead Avenue between Bryn Mawr and Wellesley Drives. Some dimensions vary through the corridors; however, this section is relatively representative of the study corridors.

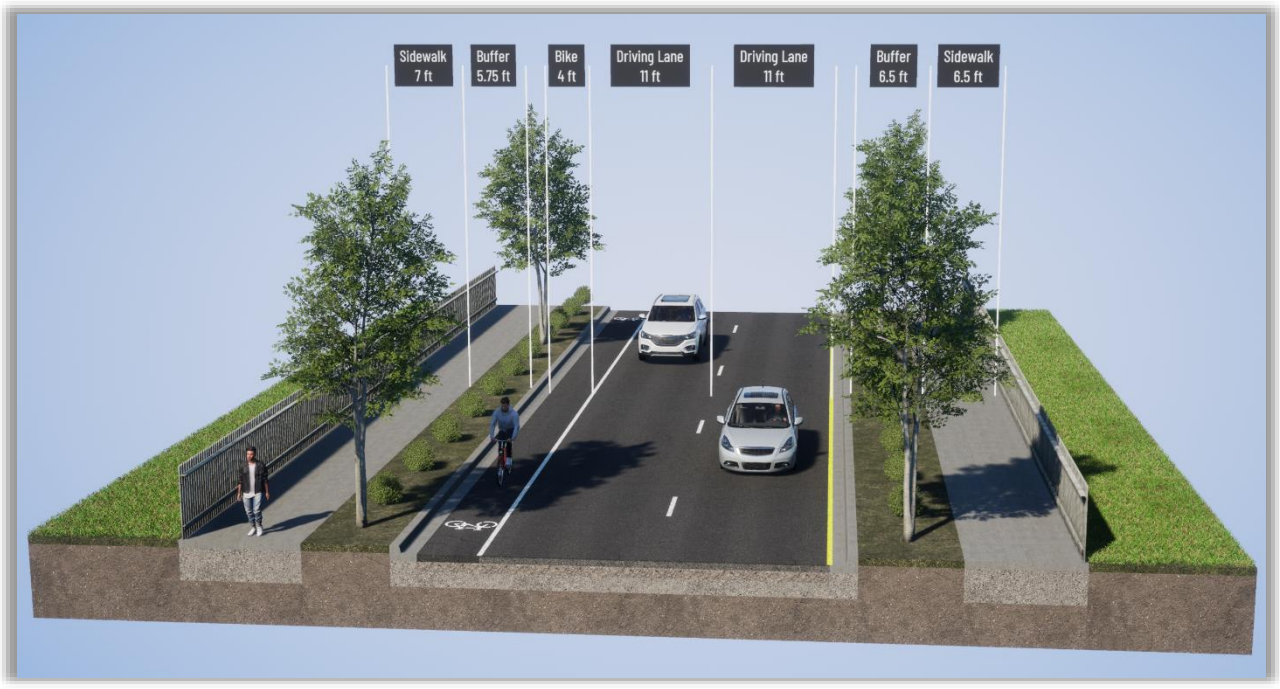


Figure 20: Existing Typical Section

Single-Lane Operation

A single-lane operation along the Lead and Coal corridors will reduce the number of east and westbound lanes from two to one. One concept for a typical section under a single-lane configuration could comprise a buffered 5-foot bicycle lane with a 3-foot buffer, a 10-foot driving lane, and an additional 10-foot buffer, as shown in Figure 21The City of Albuquerque's Development Process Manual indicates that the minimum width of a travel lane for all road functional classifications is 10 feet; this lane width is recommended for this and subsequent alternatives as a traffic-calming feature.

Speed cushions should be implemented in the 10-foot buffer to discourage its use during busier times of the day. This feature intends to prevent using the buffer space as a passing lane when the road is congested while still allowing unobstructed use by emergency vehicles. Likewise, bicyclist safety can be enhanced by installing vertical elements inside the buffer, creating a Separated Bicycle Lane. The vertical elements create greater separation from motor vehicles and discourage using the wide bicycle lane and buffer as a driving/passing lane. However, the recently adopted City of Albuquerque 2024 Bikeway and Trail Facilities Plan guidance indicates that vertical separation may not be appropriate for Lead and Coal with frequent access points such as intersections, alleyways, and driveways.

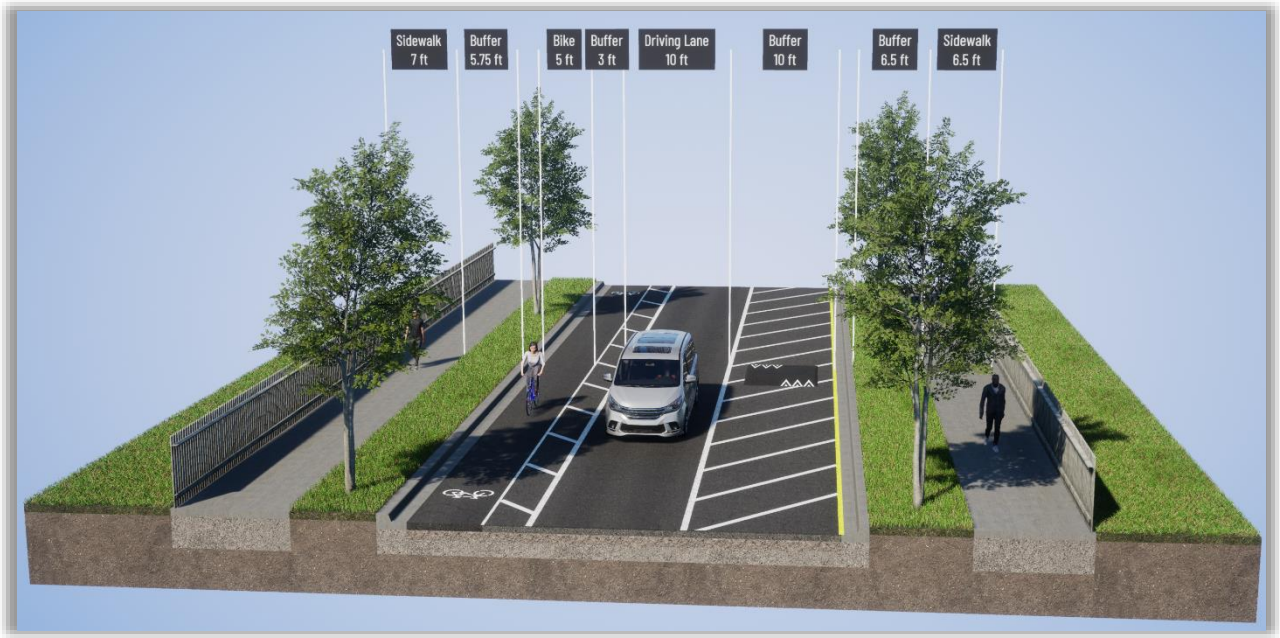


Figure 21: Typical Section Concept for Single-Lane Operation

Two analyses were completed for the single-lane configuration. The first analysis comprises a single lane from Broadway Boulevard to Washington Street. The second analysis is the existing configuration from Broadway Boulevard to Yale Boulevard and then the single-lane configuration from Yale Boulevard to Washington Street.

Two-Way Operation

Two-way operations along the Lead and Coal corridors require reconfiguring the roadway to allow bidirectional travel. This alternative will require additional traffic signal mast arms, signage, and new striping. A typical section for this configuration could include a buffered 5-foot bicycle lane with a 3-foot buffer and two 10-foot driving lanes. The typical section is shown in Figure 22.

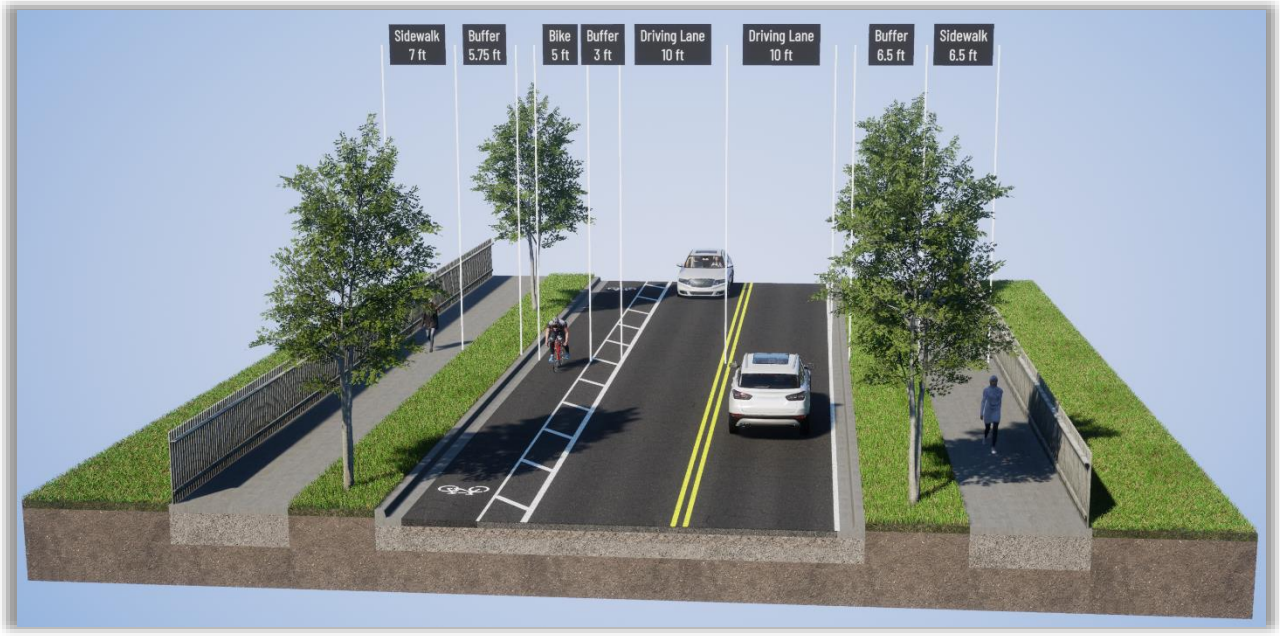


Figure 22: Two-Way Operation Configuration

ORIGIN AND DESTINATION ANALYSIS

An origin and destination analysis aims to review existing traffic data and identify travel patterns from select locations. This study selected three locations along the Lead Avenue and Coal Avenue corridors to determine if they are being used to travel past the corridors' extent. This analysis concluded that most drivers historically began and ended their trips within the study area.

TRAFFIC DIVERSION

As conditions change along the Lead and Coal corridors, some drivers may avoid certain areas and divert to nearby corridors. A diverted vehicle is defined as a vehicle that alters its travel path based on conditions it encounters. Specific to this analysis, a vehicle will divert from its original path when encountering longer-than-expected travel times. This can result from roadway and signal configuration, crashes, or events. Initially, the Lomas Boulevard, Central Avenue, Garfield Boulevard, and Gibson Boulevard corridors were considered for diversion. However, based on the origin and destination analysis, it was determined that drivers were likely to divert to Central Avenue and Garfield Boulevard.

Two-Way Operation Alternative

The Two-Way Operation alternative is not expected to divert traffic; therefore, no diversion proportions were applied to the scenario.

Speed Reduction Alternative

The following diversion proportions are shown in Figure 23 and were used for the Speed Reduction alternative. The minor traffic diversion proportions were used in the Speed Reduction alternative analysis. The Speed Reduction alternative is expected to incur minimal impacts, which is why a minor diversion was assessed.

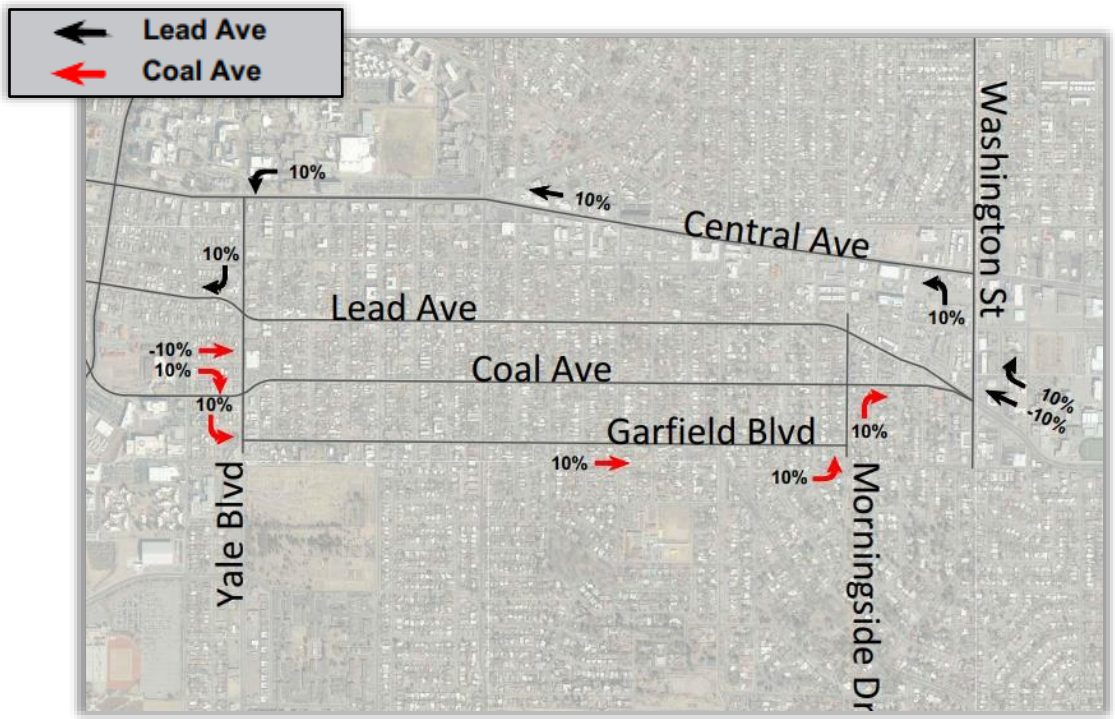


Figure 23: Speed Reduction Minor Traffic Diversion

Single-Lane Operation Alternative

The following diversion proportions are shown in Figure 24 and were used for the Single-Lane Operation alternative analysis. The minor traffic diversion proportions were also used in this analysis.

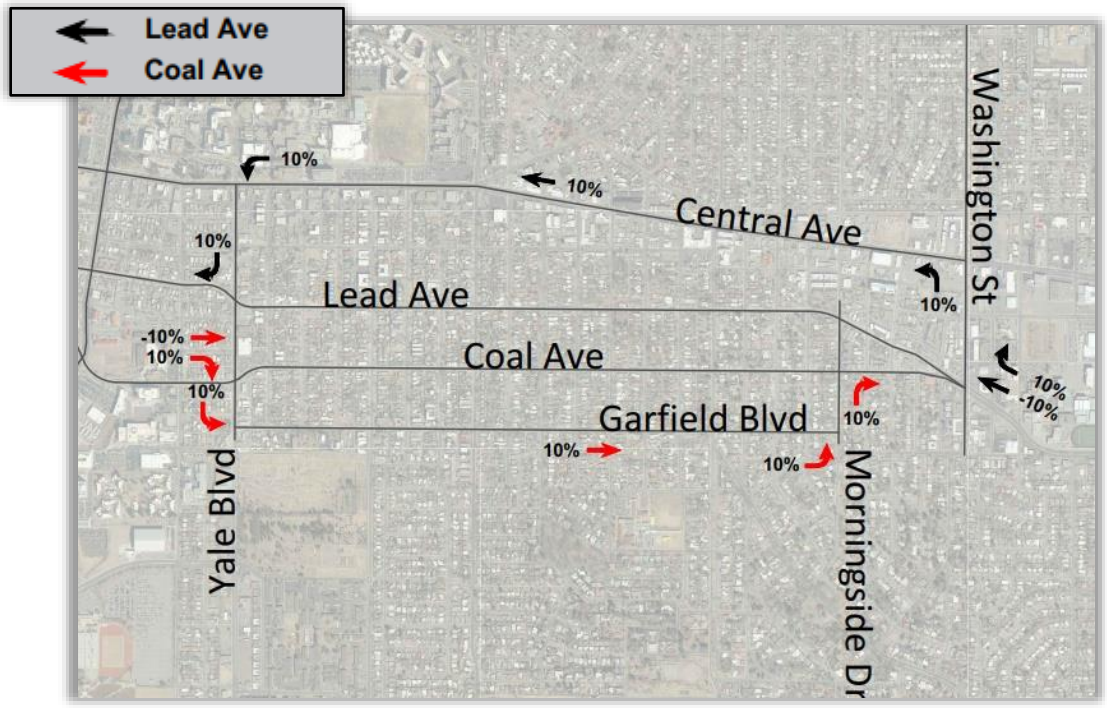


Figure 24: Single-Lane Operation Minor Traffic Diversion

However, the delay anticipated by the original diversion percentages was significant enough to consider additional diversion percentages in this analysis. Therefore, Lee Engineering applied additional proportions to other travel paths. The additional diversion includes traffic shifted in the I-25 to Yale Boulevard and Yale Boulevard to Washington Street sections. Figure 25 depicts the additional diversion.

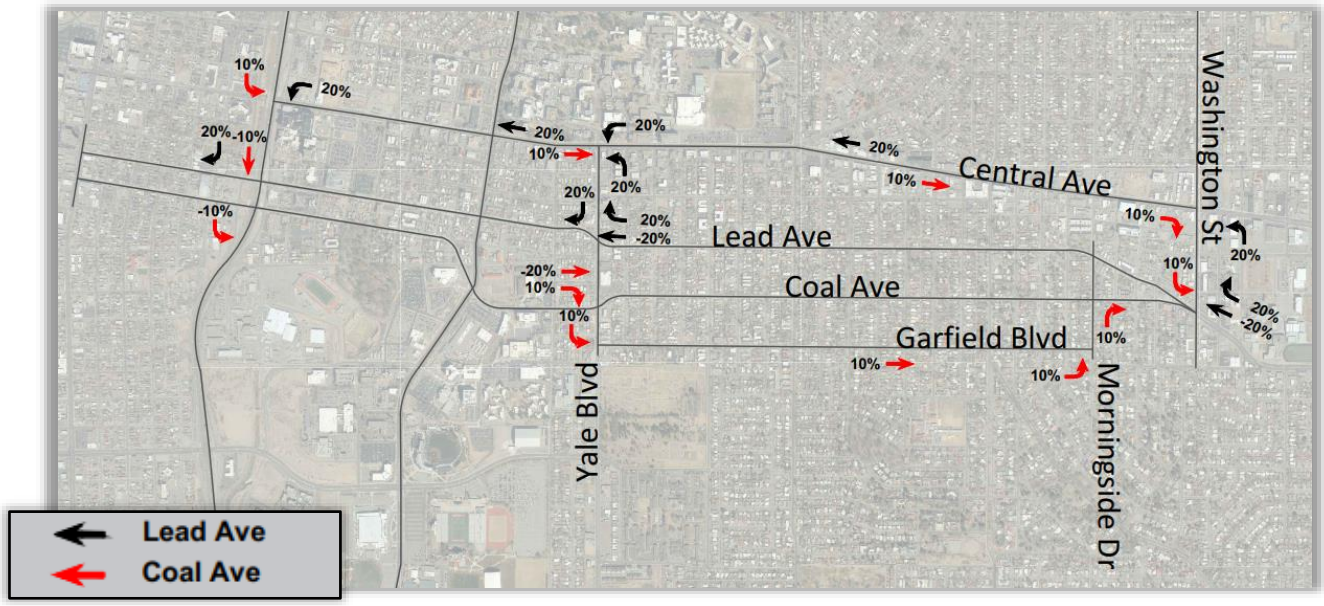


Figure 25: Additional Diversion for Single-Lane Operation

TRAFFIC ANALYSIS

The Synchro 12 analysis software was used to analyze the study intersections for Level of Service (LOS) and 95th percentile queueing conditions. Synchro 12 implements methods and procedures detailed by the Highway Capacity Manual (HCM). Detailed capacity output sheets showing all individual movements can be found in Appendix E.

MOTOR VEHICLE LOS, CAPACITY, AND QUEUING ANALYSIS

Per the HCM, LOS is presented as a letter grade (A through F) based on the calculated average delay for an intersection or movement. Delay is calculated as a function of several variables, including signal phasing operations, cycle length, traffic volumes, and opposing traffic volumes. Still, it measures the average wait time a driver can expect when moving through an intersection. Factors such as total cycle time (for all movements), queueing restrictions, and vehicle volumes can affect delay measurements, especially for lower-volume movements and side streets. Generally, these factors are only realized when delays reach or exceed LOS E thresholds. In such cases, subsequent sections offer a narrative specific to the individual movement in question. Traffic counts are in Appendix C. Complete HCM Results Summary Reports are in Appendix E.

Signal timing provided by the City of Albuquerque was used for analysis. The Rest-in-Red operations occur during off-peak hours. This study analyzed peak hour periods; therefore, the Rest-in-Red operations did not affect the analysis.

Table 17 and Table 18 The HCM reproduces delay thresholds and the associated Level of service assigned to delay ranges for signalized intersections and stop-controlled intersections, respectively. Generally, an LOS of D or better is considered an acceptable level of service.

Table 17: LOS Criteria and Descriptions for Signalized Intersections

Level of Service	Average Control Delay (sec/vehicle)	General Description (Signalized Intersections)
A	≤10	Free flow
B	>10 – 20	Stable flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

Table 18: LOS Criteria for Unsignalized Intersections

Level of service	Average Control Delay (sec/vehicle)
A	≤10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

Queueing is reported in feet for all intersections with queue lengths greater than one vehicle, with a base assumption of 25 feet queue length per vehicle. Queues are reported for queue measurements falling within the 95th percentile. Notably, 95th percentile queues are statistically expected to occur during only 5% of the peak hour's sign cycles. It is also noted that unreported average queueing at an intersection would statistically be much shorter than 95th-percentile queueing.

The volume-to-capacity (V/C) ratio is a performance measure showing the traffic volume ratio to the lane group capacity. A V/C ratio greater than 1.00 indicates that demand creates a residual queue for the analysis period.

For this analysis, acceptable levels of service (LOS) are defined as a LOS D or better. Based on procedures outlined in the HCM, intersection delay and level of service for stop-controlled intersections are reported as the delay and level of service for the worst-case movement at each intersection. For all other control types, they are taken for the whole intersection. Detailed output sheets can be found in Appendix E.

Existing Year 2024 AM and PM Conditions

LOS

Existing year conditions include the existing lane configurations, intersection signal timing, and volumes along the corridors. Figure 26 and Figure 27 These figures show the intersection LOS for each intersection's AM and PM peak hours. The intersections operate at acceptable LOS during AM and PM peak hours.

Figure 26: Vehicle LOS – Existing AM

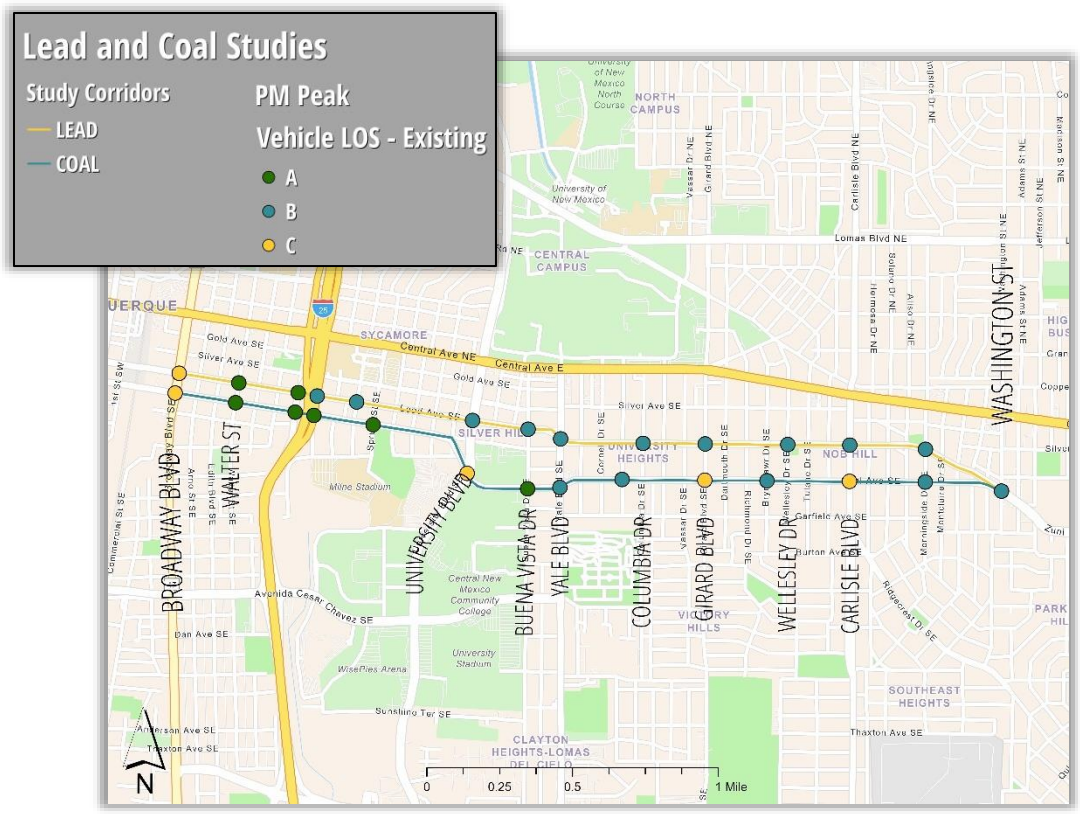


Figure 27: Vehicle LOS - Existing PM

Queueing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 28 and Figure 29 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are not currently exceeding the distance to the next cross street.

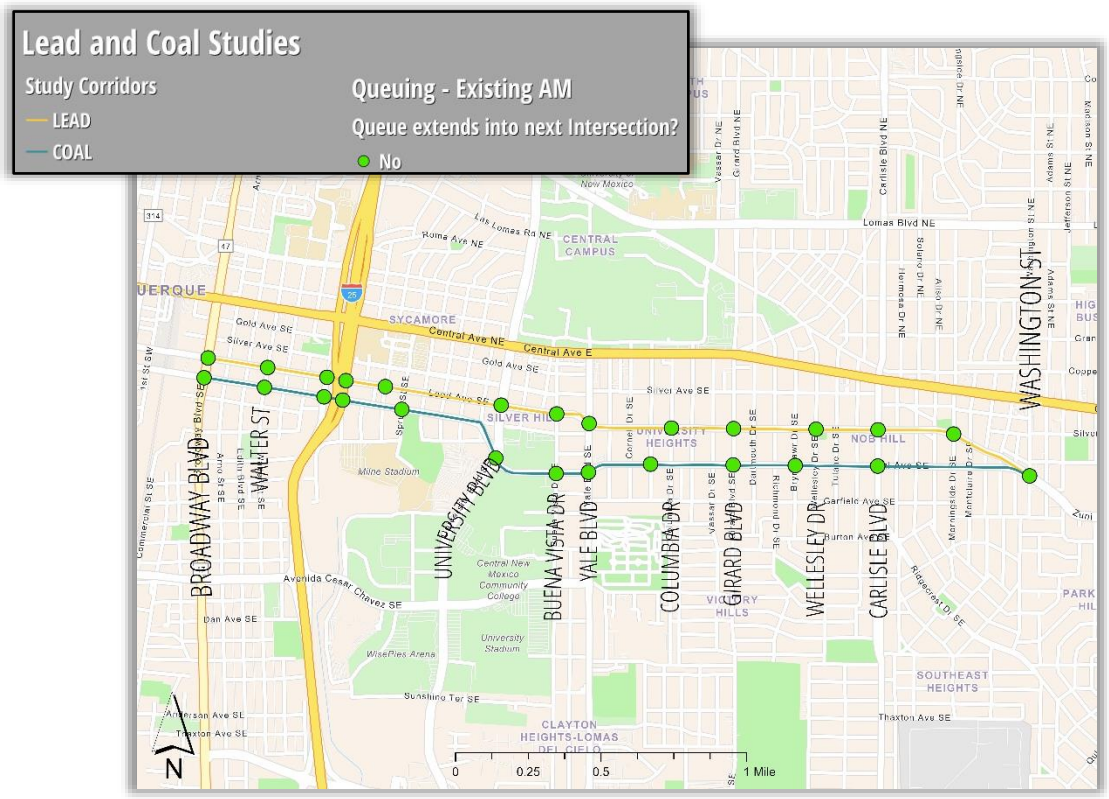


Figure 28: Queueing Results - Existing AM

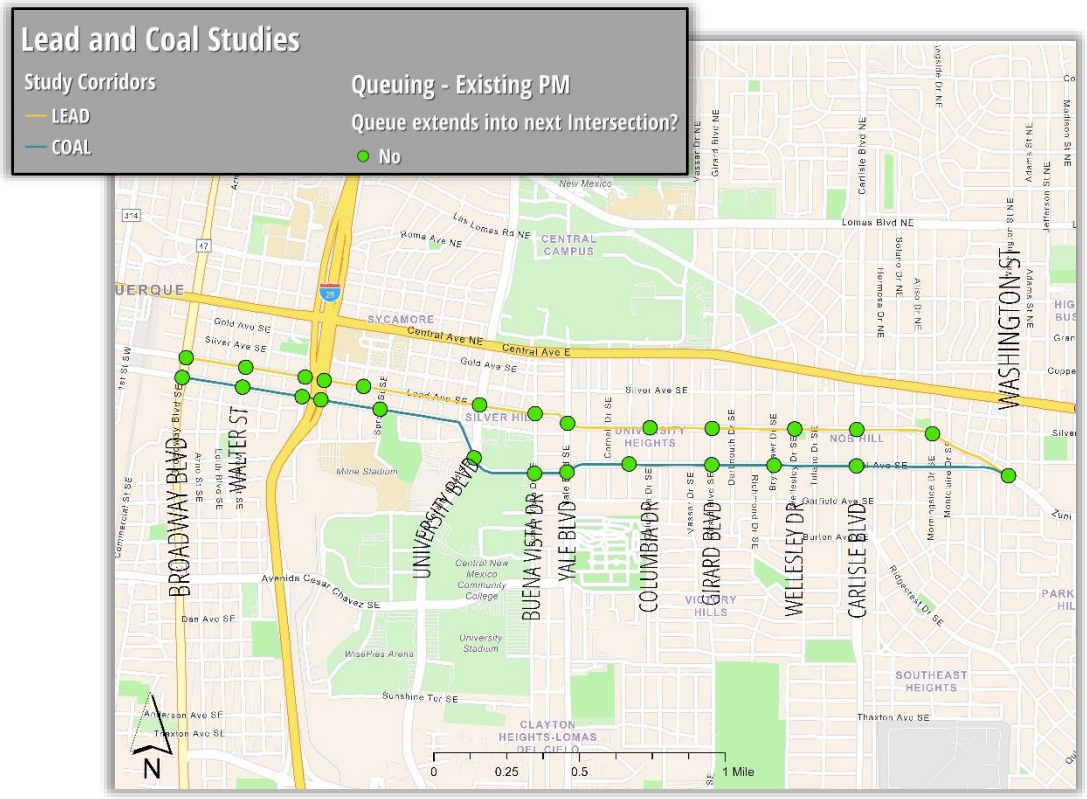


Figure 29: Queueing Results - Existing PM

Speed Reduction AM and PM Conditions

LOS

Speed reduction conditions include the existing lane configurations, existing intersection signal timing with offsets optimized for 25 MPH, and diverted volumes along the corridors analyzed with a 25 MPH speed limit. Figure 30 and Figure 31 show the intersection LOS for each intersection. These figures show that the intersections are expected to operate at acceptable LOS in the AM and PM peak hours under the Speed Reduction scenario.

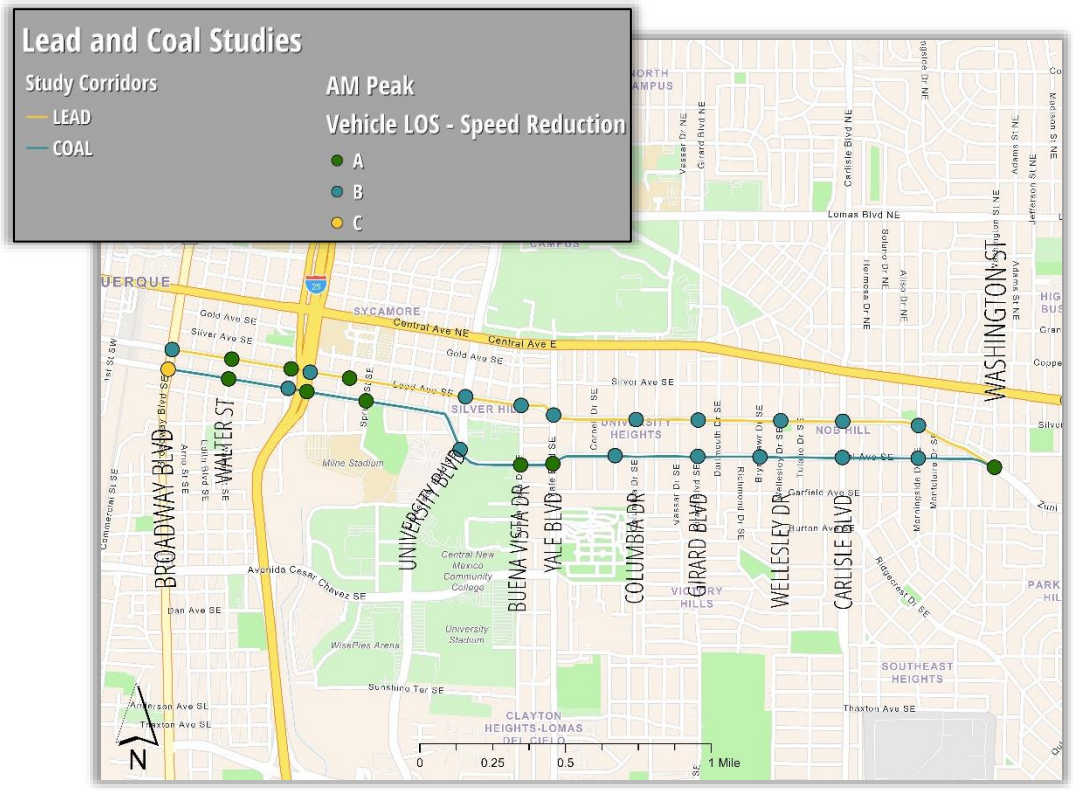


Figure 30: Vehicle LOS – Speed Reduction AM

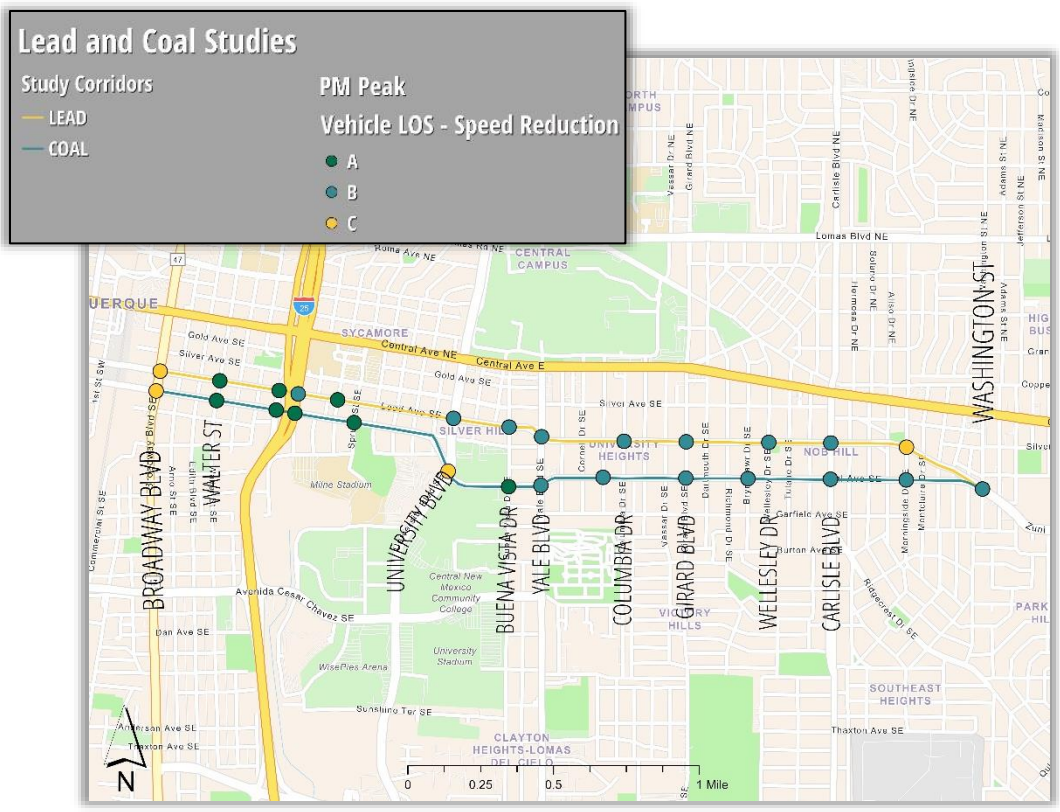


Figure 31: Vehicle LOS – Speed Reduction PM

Queuing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 32 and Figure 33 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are not expected to exceed the distance to the next cross street under the Speed Reduction scenario except for the intersection of Lead Avenue and Morningside Drive.

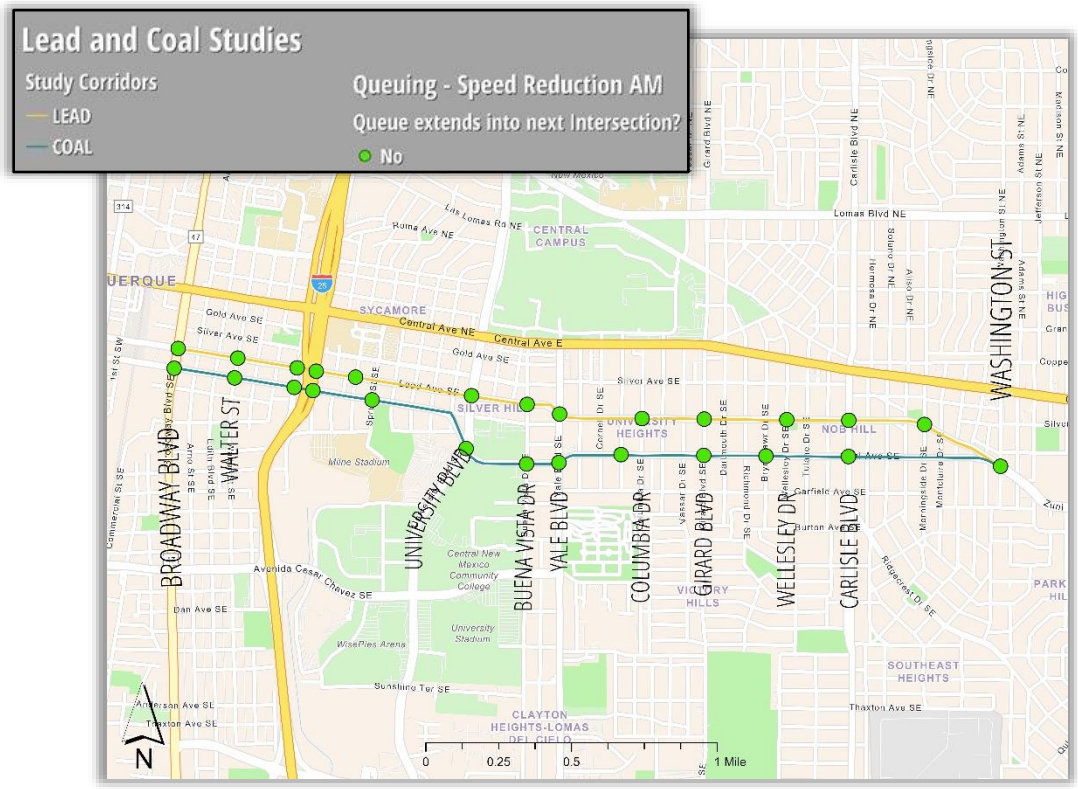


Figure 32: Queueing Results - Speed Reduction AM

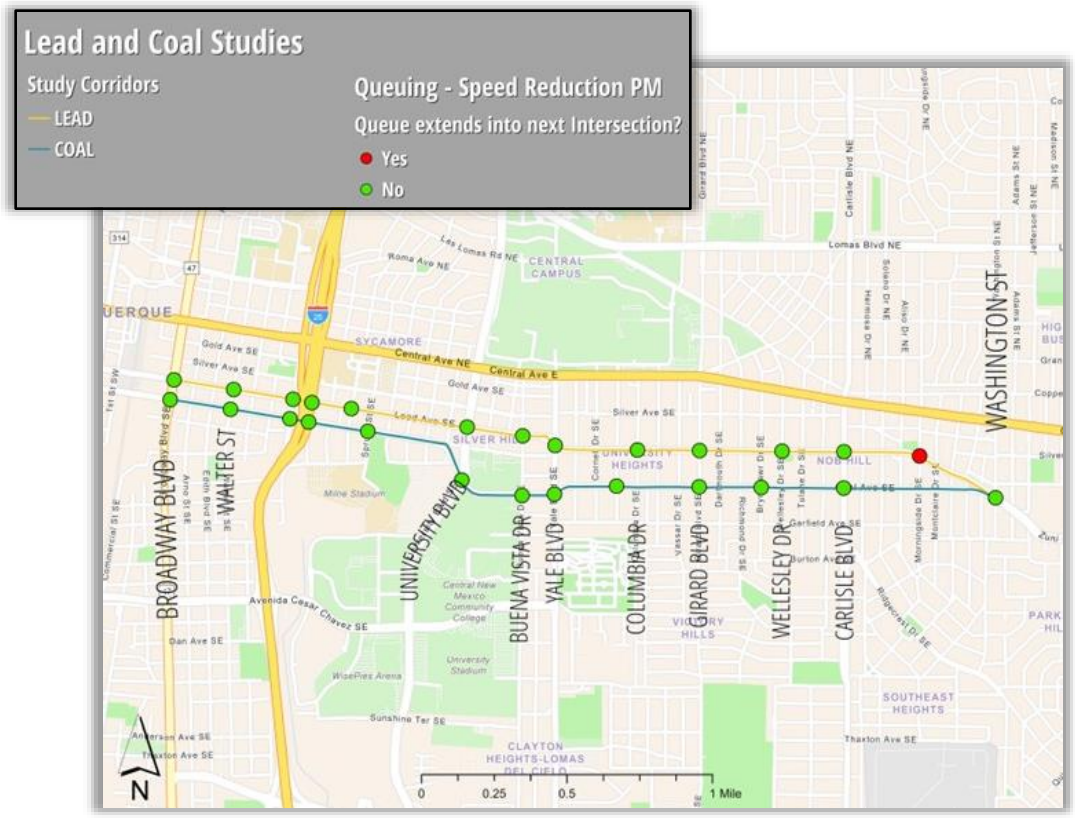


Figure 33: Queueing Results – Speed Reduction PM

Single-Lane Operation AM and PM Conditions

Single-lane operation conditions include single-lane configurations, existing intersection signal timing, and diverted volumes. Figure 34 and Figure 35 show the intersection LOS for each intersection. These figures show that the intersections are expected to operate at acceptable LOS in both the AM and PM peak hours under the Speed Reduction scenario, except for the intersection of Coal Avenue and University Boulevard in the PM peak hour.

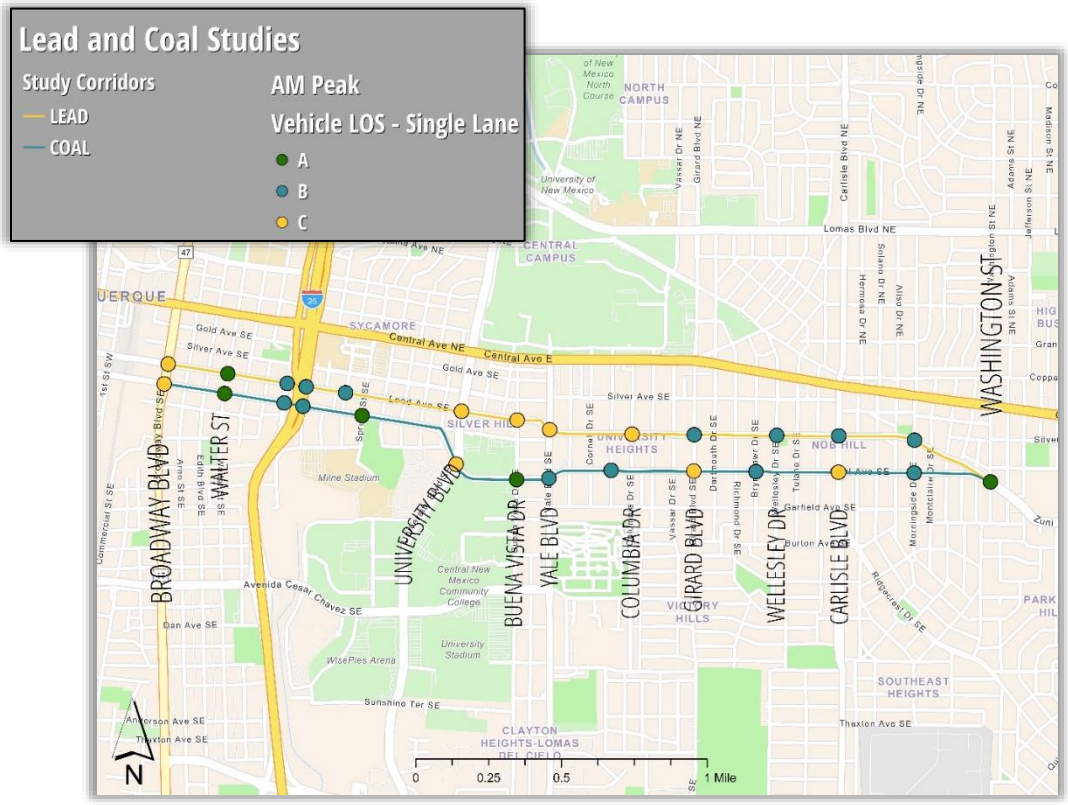


Figure 34: Vehicle LOS – Single-Lane Operation AM

Figure 35: Vehicle LOS – Single-Lane Operation PM

Queueing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 36 and Figure 37 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are expected to exceed the distance to the next cross street under the Single-Lane Operation scenario except for the following intersections:

- Lead Avenue and Broadway Boulevard in the AM and PM
- Lead Avenue and Walter Street in the AM and PM
- Lead Avenue and University Boulevard in the AM and PM
- Lead Avenue and Buena Vista Drive in the AM and PM
- Lead Avenue and Columbia Drive in the AM and PM
- Lead Avenue and Girard Boulevard in the PM
- Lead Avenue and Wellesley Drive in the PM
- Lead Avenue and Carlisle Boulevard in the PM
- Lead Avenue and Morningside Drive in the PM
- Coal Avenue and Locust Street in the AM and PM
- Coal Avenue and Oak Street in the AM
- Coal Avenue and Stanford Drive in the PM
- Coal Avenue and Girard Boulevard in the PM
- Coal Avenue and Bryn Mawr Drive in the PM
- Coal Avenue and Carlisle Boulevard in the PM

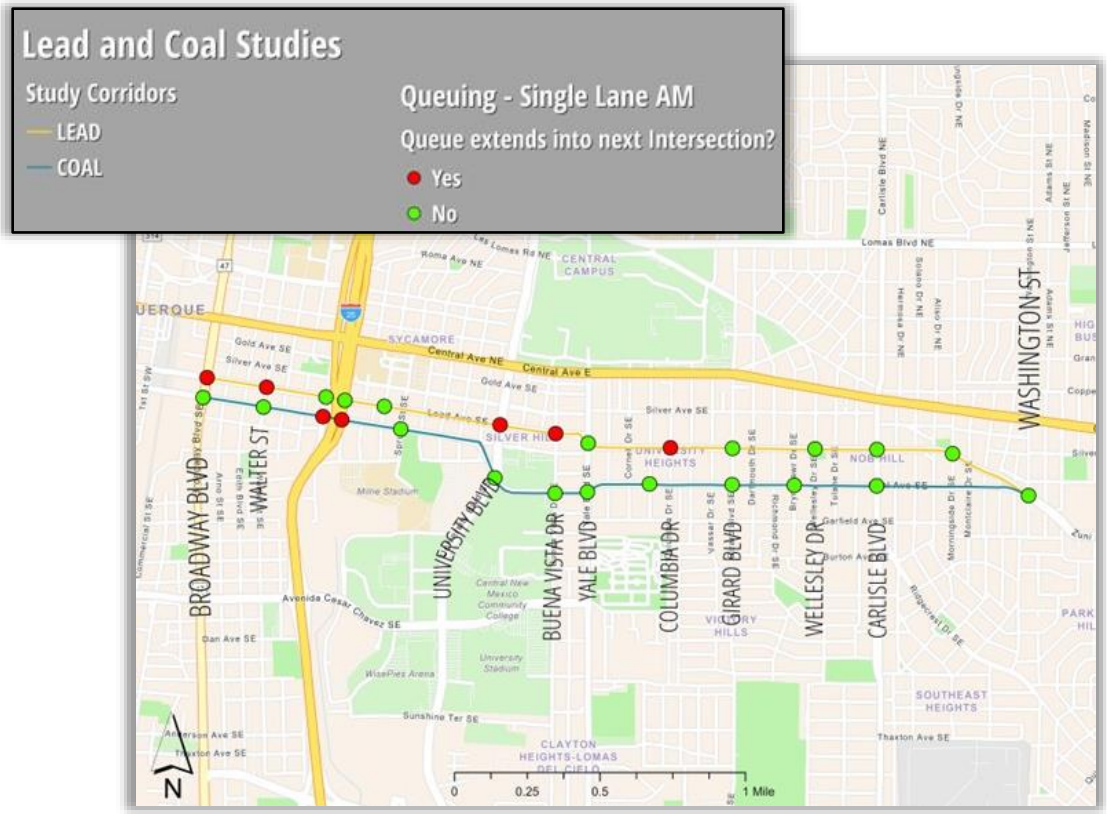


Figure 36: Queueing Results – Single-Lane Operation AM

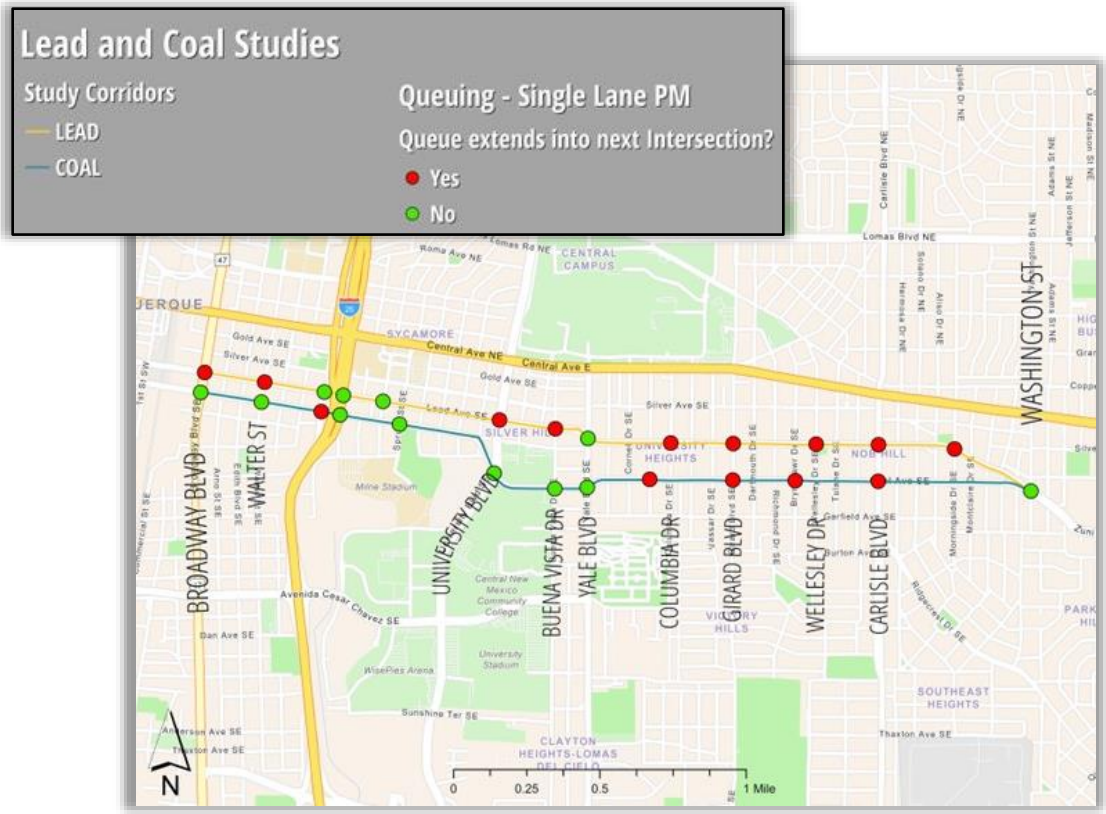


Figure 37: Queueing Results – Single-Lane Operation PM

Single-Lane Operation with Additional Diversion AM and PM Conditions

The delay anticipated by the original diversion percentages was significant enough to consider additional diversion percentages in this analysis. Single-lane operation with additional diversion conditions includes single-lane configurations, existing intersection signal timing, and diverted volumes. Figure 38 and Figure 39 show the intersection LOS for each intersection. From these figures, it can be concluded that the intersections are expected to operate at acceptable LOS in both the AM and PM peak hours under the single-lane operation with additional diversion scenarios except for the intersection of Coal Avenue and University Boulevard in the PM peak hour.

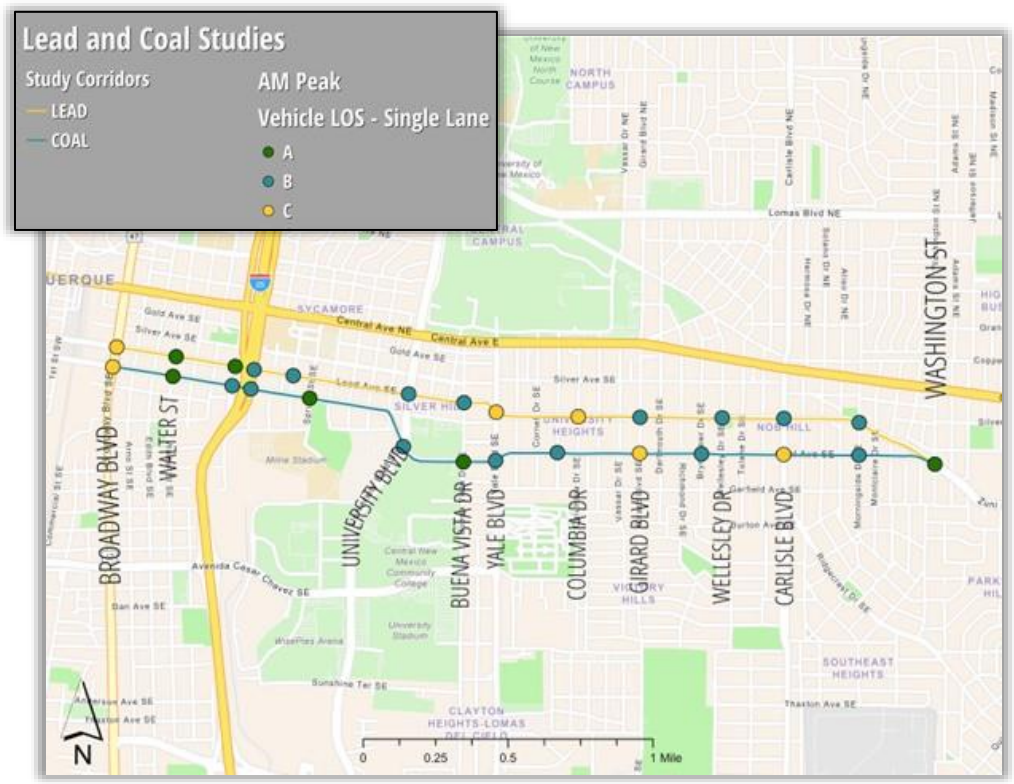


Figure 38: Vehicle LOS – Single-Lane Operation with Additional Diversion AM

Figure 39: Vehicle LOS – Single-Lane Operation with Additional Diversion PM

Queueing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 40 and Figure 41 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are not expected to exceed the distance to the next cross street under the Single-Lane Operation with Additional Diversion scenario except for the following intersections:

- Lead Avenue and Broadway Boulevard in the AM and PM
- Lead Avenue and Walter Street in the AM and PM
- Lead Avenue and University Boulevard in the AM and PM
- Lead Avenue and Buena Vista Drive in the AM and PM
- Lead Avenue and Columbia Drive in the AM and PM
- Lead Avenue and Girard Boulevard in the PM
- Lead Avenue and Wellesley Drive in the PM
- Lead Avenue and Carlisle Boulevard in the PM
- Lead Avenue and Morningside Drive in the PM
- Coal Avenue and Stanford Drive in the PM
- Coal Avenue and Girard Boulevard in the PM
- Coal Avenue and Bryn Mawr Drive in the PM
- Coal Avenue and Carlisle Boulevard in the PM

Figure 40: Queueing Results – Single-Lane Operation with Additional Diversion AM

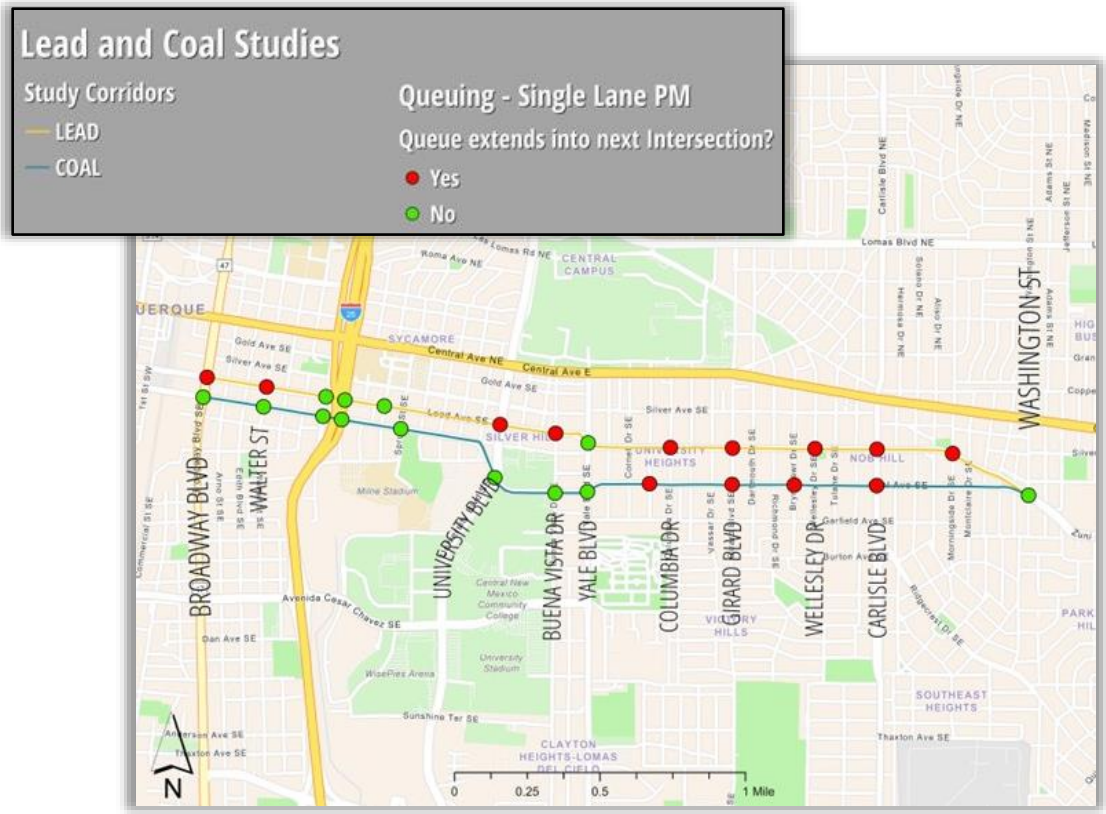


Figure 41: Queueing Results – Single-Lane Operation with Additional Diversion PM

Single-Lane Operation from Yale Boulevard to Washington Street AM and PM Conditions

Single-lane operation from Yale Boulevard to Washington Street conditions include the existing configuration from Broadway Boulevard to Yale Boulevard, intersection signal timing, and diverted volumes. Figure 42 and Figure 43 show the intersection LOS for each intersection. From these figures, it can be concluded that the intersections are expected to operate at acceptable LOS in both the AM and PM peak hours under the Single-Lane Operation from Yale Boulevard to Washington Street scenarios.

Figure 42: Vehicle LOS – Single-Lane Operation from Yale Blvd to Washington St AM

Figure 43: Vehicle LOS – Single-Lane Operation from Yale Blvd to Washington St PM

Queueing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 44 and Figure 45 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are not expected to exceed the distance to the next cross street under the Single-Lane Operation from Yale Boulevard to Washington Street scenario except for the following intersections:

- Lead Avenue and Columbia Drive in the AM and PM
- Lead Avenue and Girard Boulevard in the PM
- Lead Avenue and Wellesley Drive in the PM
- Lead Avenue and Carlisle Boulevard in the PM
- Lead Avenue and Morningside Drive in the PM
- Coal Avenue and Stanford Drive in the PM
- Coal Avenue and Girard Boulevard in the PM
- Coal Avenue and Bryn Mawr Drive in the PM
- Coal Avenue and Carlisle Boulevard in the PM

Figure 44: Queueing Results – Single-Lane Operation from Yale Blvd to Washington St AM

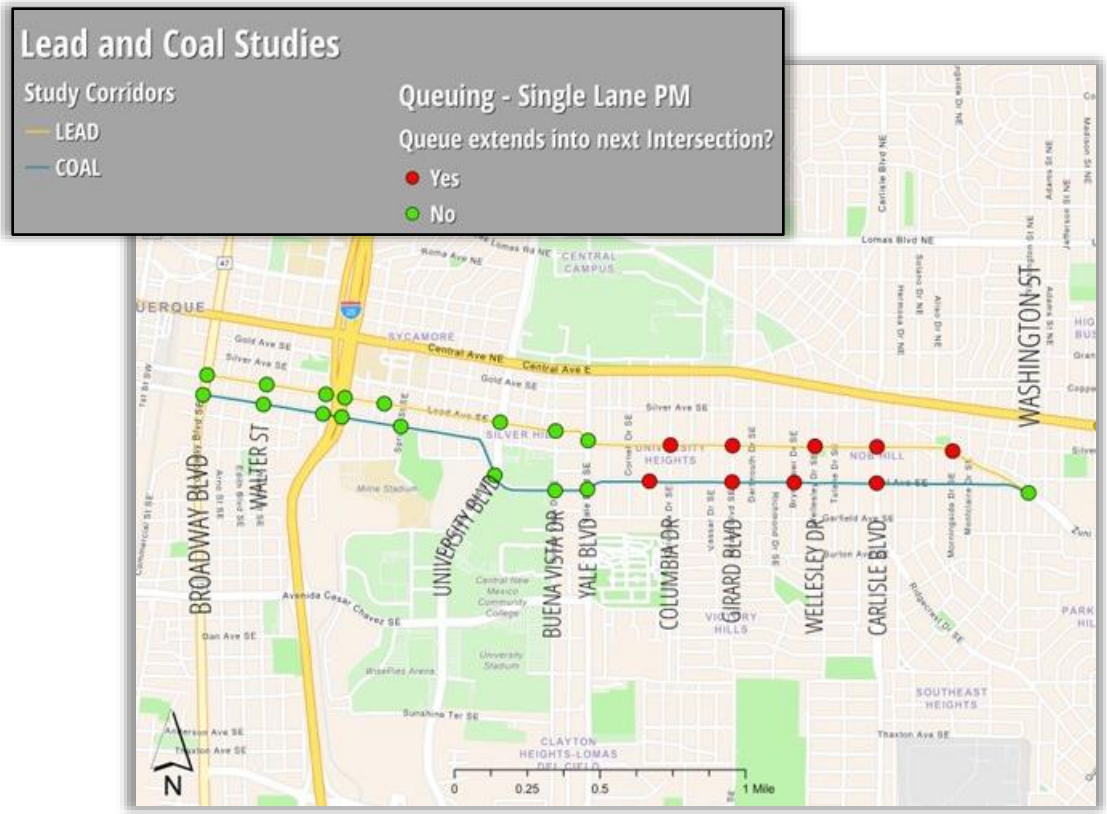


Figure 45: Queueing Results – Single-Lane Operation from Yale Blvd to Washington St PM

Two-way operation AM and PM Conditions

Two-way operation conditions include bidirectional lane configurations, existing intersection signal timing, and existing volumes. Figure 46 and Figure 47 show the intersection LOS for each intersection. From these figures, it can be concluded that the intersections are expected to operate at acceptable LOS in both the AM and PM peak hours under the Two-Way Operation scenario except for the following intersections:

- Lead Avenue and University Boulevard in the PM
- Coal Avenue and University Boulevard in the PM

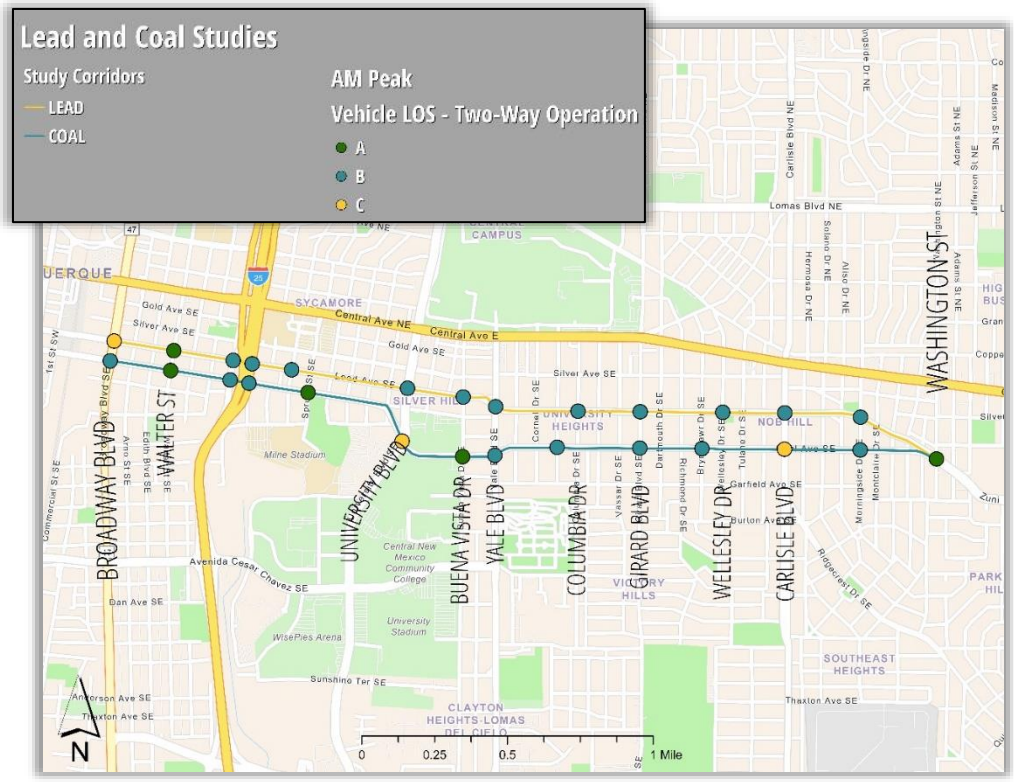


Figure 46: Vehicle LOS - Two-Way Operation AM

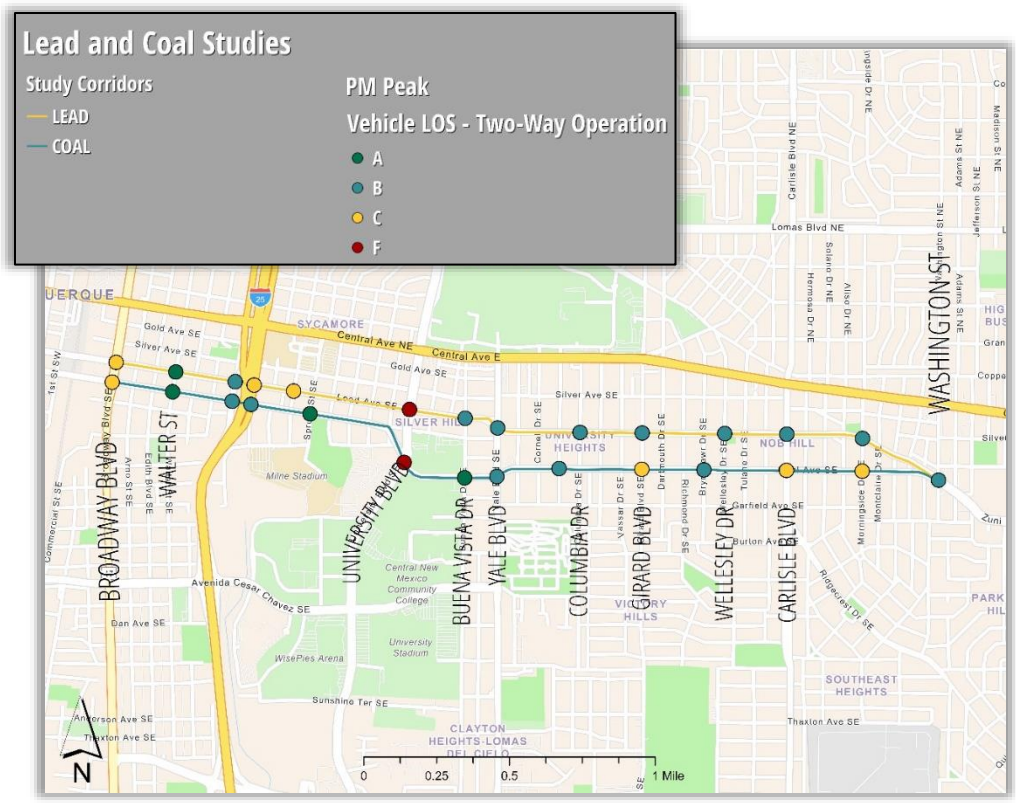


Figure 47: Vehicle LOS - Two-Way Operation PM

Queuing

Queueing at each intersection was also assessed. The expected 95th percentile queue in the east and west directions was compared with the distance to the next cross street. Figure 48 and Figure 49 detail whether the 95th percentile queue is expected to exceed the distance to the next cross street. From these figures, it can be concluded that the 95th percentile queue lengths are not expected to exceed the distance to the next cross street under the Two-Way Operation scenario except for the following intersections:

- Lead Avenue and Oak Street in the PM
- Lead Avenue and University Boulevard in the PM

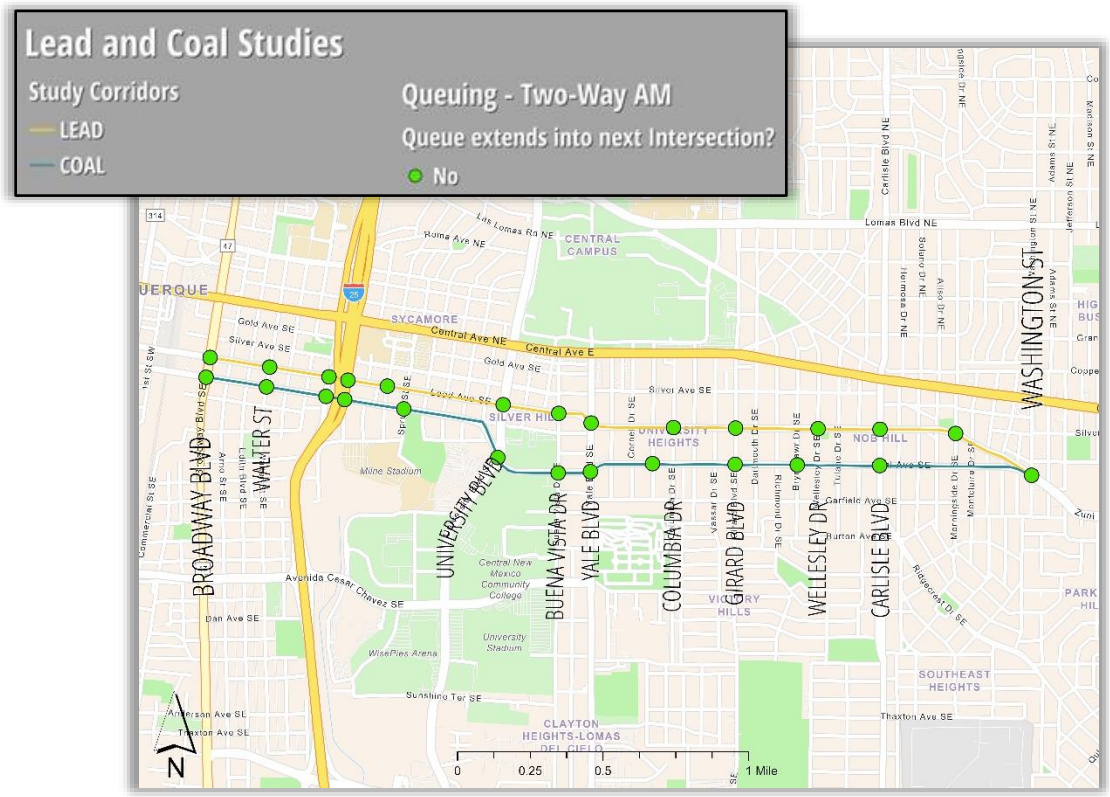


Figure 48: Queueing Results – Two-Way Operation AM

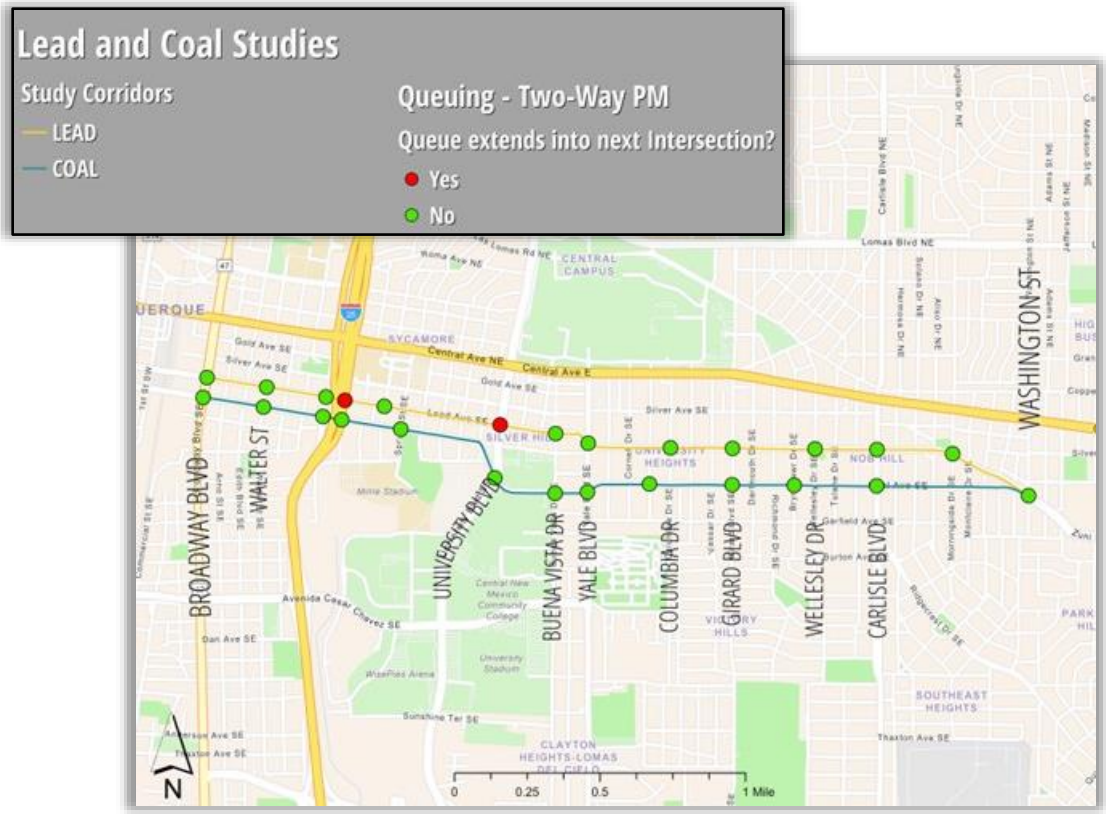


Figure 49: Queueing Results - Two-Way Operation PM

PEDESTRIAN LOS

Pedestrian LOS is a quantitative tool used to assess a pedestrian's time to traverse an intersection. The Synchro software used in the traffic analysis assesses Pedestrian LOS based on the signal timing and coordination plans. This analysis reviews Pedestrian LOS by intersection. Figure 50 and Figure 51 show the Pedestrian LOS by intersection. From these figures, it can be concluded that the intersections are expected to operate at acceptable Pedestrian LOS in both the AM and PM peak hours under the Speed Reduction scenario.

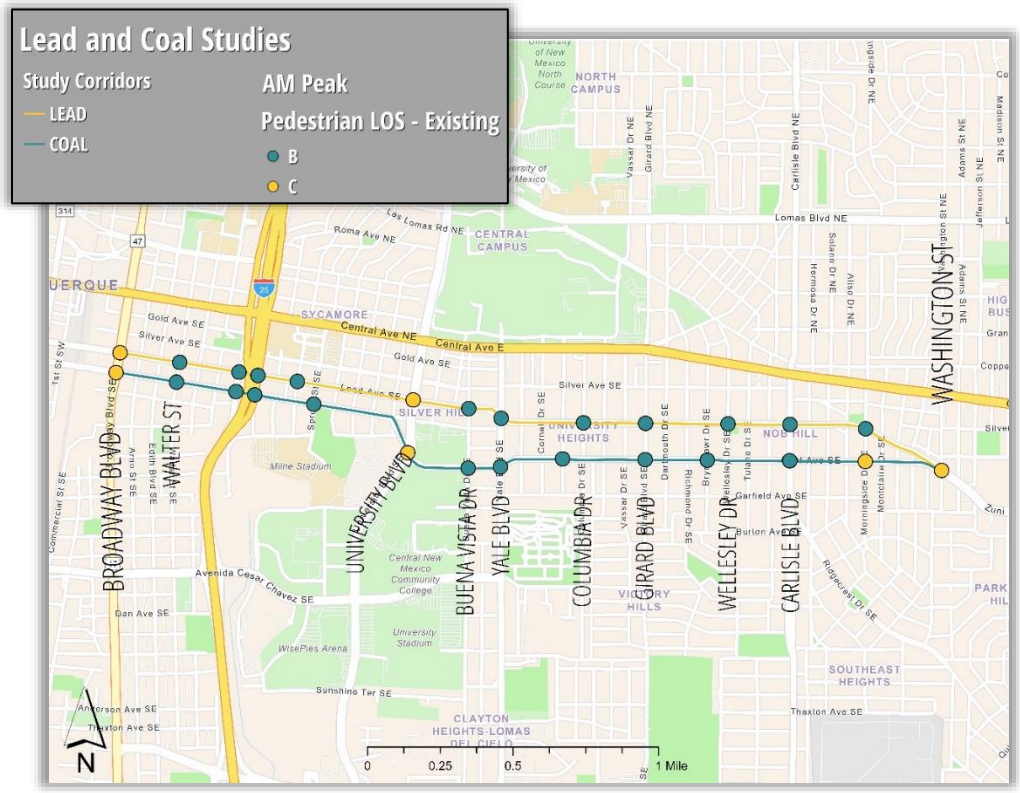


Figure 50: Pedestrian LOS - Existing AM

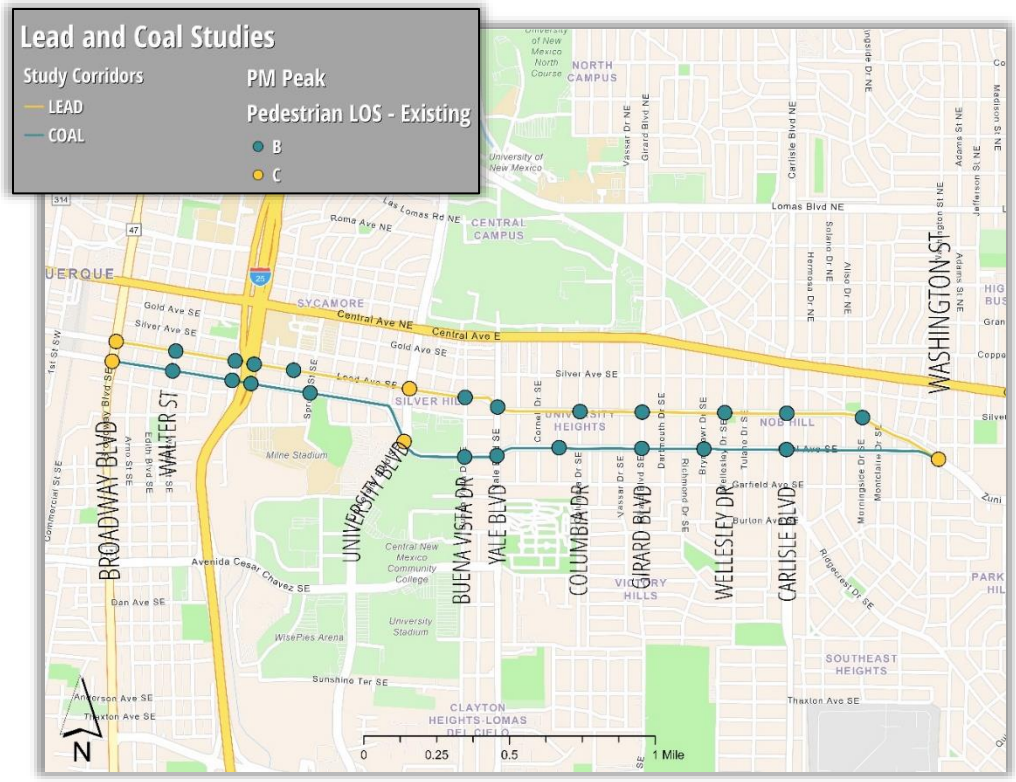


Figure 51: Pedestrian LOS - Existing PM

Pedestrian Level of Traffic Stress (PLTS)

PLTS is a qualitative tool to evaluate how comfortable, safe, and accessible a pedestrian facility feels based on motor vehicle traffic volume (AADT), traffic speed (85th Percentile), sidewalk width, buffer width, the space between motor vehicles and pedestrian facility, i.e., paved shoulder width, bicycle lane, and landscaping buffer. It aids in evaluating pedestrian facilities based on stress-inducing factors rather than operational attributes, such as a quantitative measure of pedestrian LOS. PLTS uses a tiered system (1-4) to rate facilities. The tiers are described as:

- PLTS 1: Little to no stress. Users may include children and elderly individuals.
- PLTS 2: Low stress for most adults but may prove too stressful for some
- PLTS 3: Moderate to high stress discourages walking for many people
- PLTS 4: High stress, not suitable for most users

PLTS is used because it focuses on factors that make walking uncomfortable or unsafe, while PLOS evaluates how efficiently pedestrian facilities function. Figure 52 is the table for road segments with sidewalks and traffic volumes over 7,500 Average Annual Daily Traffic (AADT). The project team used an 85th percentile speed of 33 MPH for the 25 MPH alternative evaluation and 38 MPH for the others. These values are determined from the data collection efforts' worst-case scenario 85th percentile speeds. The green box indicates the portion of the table used to evaluate the Lead and Coal corridors.

		Buffer Width			
Speed	**Sidewalk Width**	> 10ft	5ft to 9ft	1ft to 4ft	None
≤ 20 mph	> 10ft	1	1	2	2
	8ft to 10ft	1	2	2	3
	5ft to 7ft	2	2	3	4
	<5ft	3	3	4	4
21-25mph	> 10ft	1	1	2	2
	8ft to 10ft	1	2	3	3
	5ft to 7ft	2	3	3	4
	<5ft	3	4	4	4
26-30mph	> 10ft	1	1	2	3
	8ft to 10ft	1	2	2	3
	5ft to 7ft	2	3	3	4
	<5ft	3	4	4	4
31-35mph	> 10ft	1	2	3	3
	8ft to 10ft	2	3	3	4
	5ft to 7ft	3	3	4	4
	<5ft	4	4	4	4
> 35mph	> 10ft	2	2	3	3
	8ft to 10ft	2	3	3	4
	5ft to 7ft	3	4	4	4
	<5ft	4	4	4	4

Figure 52: PLTS for Segments with Sidewalks and AADT >7,500

Existing and Speed Reduction PLTS

The PLTS for the Existing conditions are the same for the Speed Reduction alternative since no roadway changes occur when lowering the speed limit. The projected team took a conservative approach to driver behavior when presented with a lower speed limit. In many cases, reducing the speed limit by changing signs does little to impact motor vehicle speeds without active enforcement and roadway changes. Under these conditions, most of the corridor is PLTS 4 and only improves slightly to PLTS 3 in a few areas. Figure 53 shows the PLTS evaluation under Existing and Speed Reduction conditions.

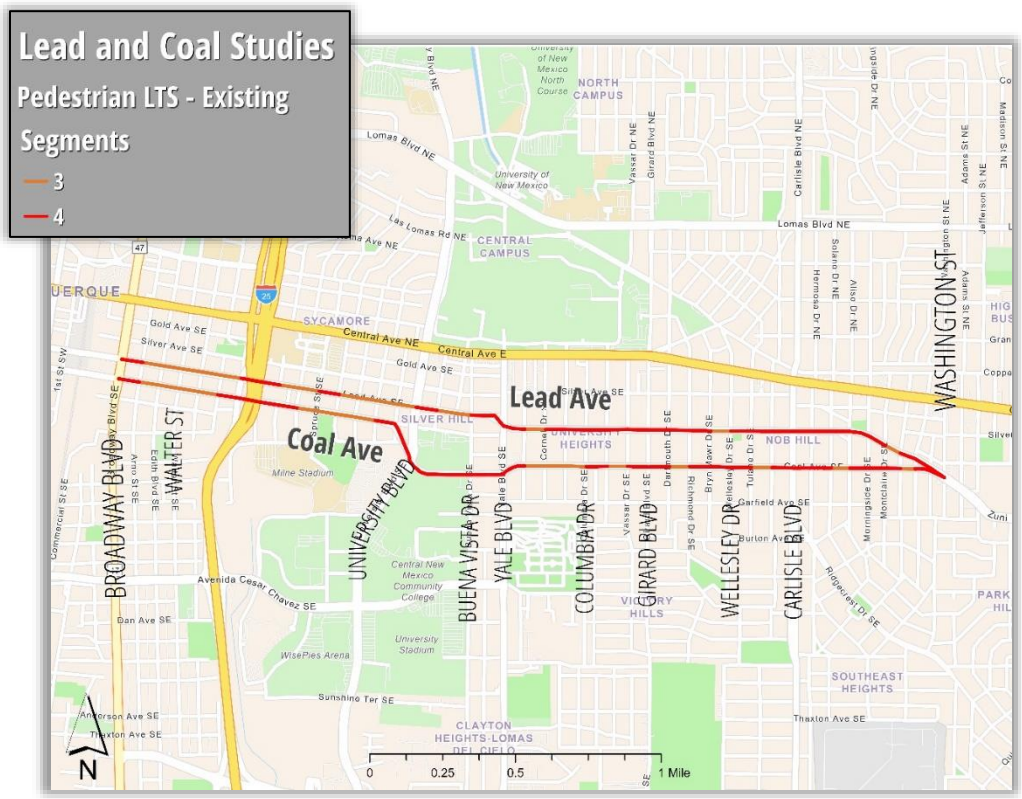


Figure 53: Pedestrian LTS – Existing and Speed Reduction

Single-Lane PLTS

The PLTS evaluation for the Single-Lane condition shows PLTS improvements corridor-wide, but most prominently in the residential area from Buena Vista Drive to Morningside Drive and Broadway Boulevard to University Boulevard. Under these conditions, most of the corridor is PLTS 3, with some areas improving to PLTS 2 and only PLTS 4 in a few places. Figure 54 shows the PLTS evaluation under Existing and Speed Reduction conditions.

Figure 54: Pedestrian LTS – Single-Lane

Two-Way PLTS

The PLTS evaluation for the Two-way operation shows PLTS, with more areas indicating PLTS 4 and only one area indicating PLTS 2. Compared to the single-lane condition, the remaining segments are at PLTS 3. However, it is still an improvement compared to the Existing and Speed Reduction conditions. Figure 55 shows the PLTS evaluation under Two-way operations.

Figure 55: Pedestrian LTS - Two-Way

BICYCLE LOS

Bicycle LOS is a quantitative tool used to assess a cyclist's time to traverse an intersection. The Synchro software used in the traffic analysis assesses Bicycle LOS based on the signal timing and coordination plans. This analysis reviews Bicycle LOS by intersection. Figure 56 and Figure 57 show the Bicycle LOS by intersection. From these figures, it can be concluded that the intersections are expected to operate at acceptable Bicycle LOS in both the AM and PM peak hours under the Speed Reduction scenario.

Figure 56: Bicycle LOS - Existing AM

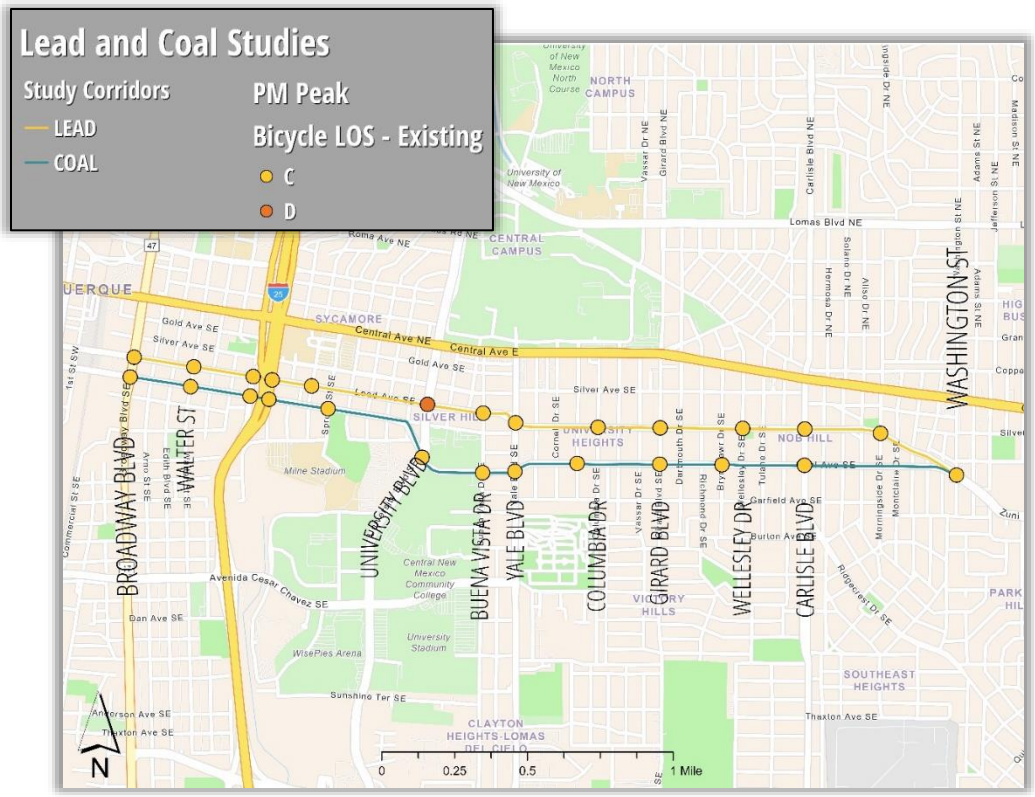


Figure 57: Bicycle LOS - Existing PM

BICYCLE LEVEL OF TRAFFIC STRESS (LTS)

Bicycle LTS is a qualitative tool that evaluates how comfortable and safe bicycle facilities may be for bicyclists based on stress-inducing factors. It assesses the facility based on traffic volume (AADT), traffic speed (85th percentile), facility type, road width, bicycle lane width, presence of parking, and the frequency of a blocked bicycle lane. BLTS uses a four-tiered system. The tiers are:

- LTS 1: Little to no stress. Comfortable for all bicyclists, including children
- LTS 2: Low Stress. Usable by most adult bicyclists but may be too stressful for children or inexperienced riders
- LTS 3: Moderate Stress. Comfortable only for experienced bicyclists
- LTS 4: High stress. Usable by confident or necessity-based riders

BLTS is used because it focuses on the bicyclist's perception of how safe a roadway feels, while Bicycle LOS evaluates efficiency and operational performance. Figure 58 shows the table for road segments with sidewalks and traffic volumes over 7,500 Average Annual Daily Traffic (AADT). The project team used an 85th percentile speed of 33 MPH for the 25 MPH alternative evaluation and 38 MPH for the others. These values are determined from the data collection efforts' worst-case scenario 85th percentile speeds. The green boxes indicate the portions of the tables used to evaluate the Lead and Coal corridors.

Table 2. Criteria for Bike Lanes Alongside a Parking Lane

	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street width (through lanes per direction)	1	(no effect)	2 or more	(no effect)
Sum of bike lane and parking lane width (includes marked buffer and paved gutter)	15 ft. or more	14 or 14.5 ft.[a]	13.5 ft. or less	(no effect)
Speed limit or prevailing speed	25 mph or less	30 mph	35 mph	40 mph or more
Bike lane blockage (typically applies in commercial areas)	rare	(no effect)	frequent	(no effect)

Note: (no effect) = factor does not trigger an increase to this level of traffic stress.

[a] *If speed limit < 25 mph or Class = residential, then any width is acceptable for LTS 2.*

Table 3. Criteria for Bike Lanes Not Alongside a Parking Lane

	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street width (through lanes per direction)	1	2, if directions are separated by a raised median	more than 2, or 2 without a separating median	(no effect)
Bike lane width (includes marked buffer and paved gutter)	6 ft. or more	5.5 ft. or less	(no effect)	(no effect)
Speed limit or prevailing speed	30 mph or less	(no effect)	35 mph	40 mph or more
Bike lane blockage (may apply in commercial areas)	rare	(no effect)	frequent	(no effect)

Note: (no effect) = factor does not trigger an increase to this level of traffic stress.

Figure 58: BLTS for Segments with and Without Adjacent Parking

Existing BLTS

The BLTS for the Existing conditions indicates that the entire corridor is a BLTS 3 despite the presence of bicycle lanes corridor-wide. Figure 59 shows the BLTS evaluation under Existing conditions.

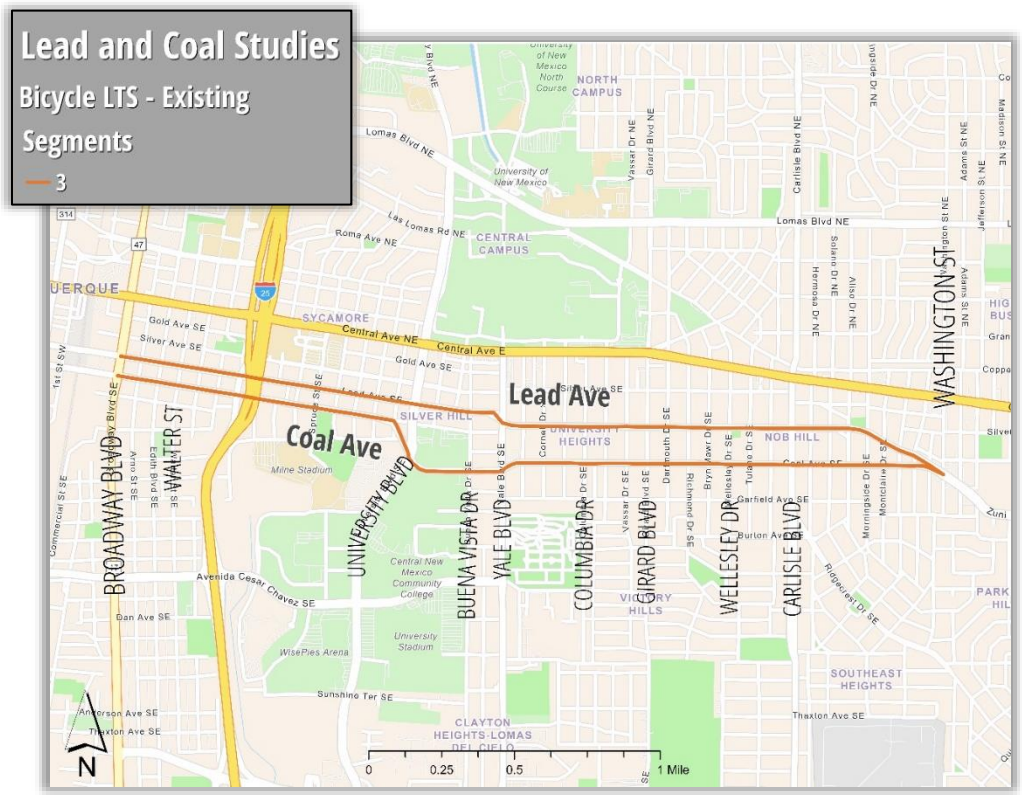


Figure 59: Bicycle LTS – Existing

Speed Reduction BLTS

The BLTS for the Speed Reduction conditions indicates that the entire corridor improves to a BLTS 2 due to a safer environment from lower speeds. As with the PLTS evaluation, this alternative hinges on speed limit compliance. Figure 60 shows the BLTS evaluation under the Speed Reduction alternative.

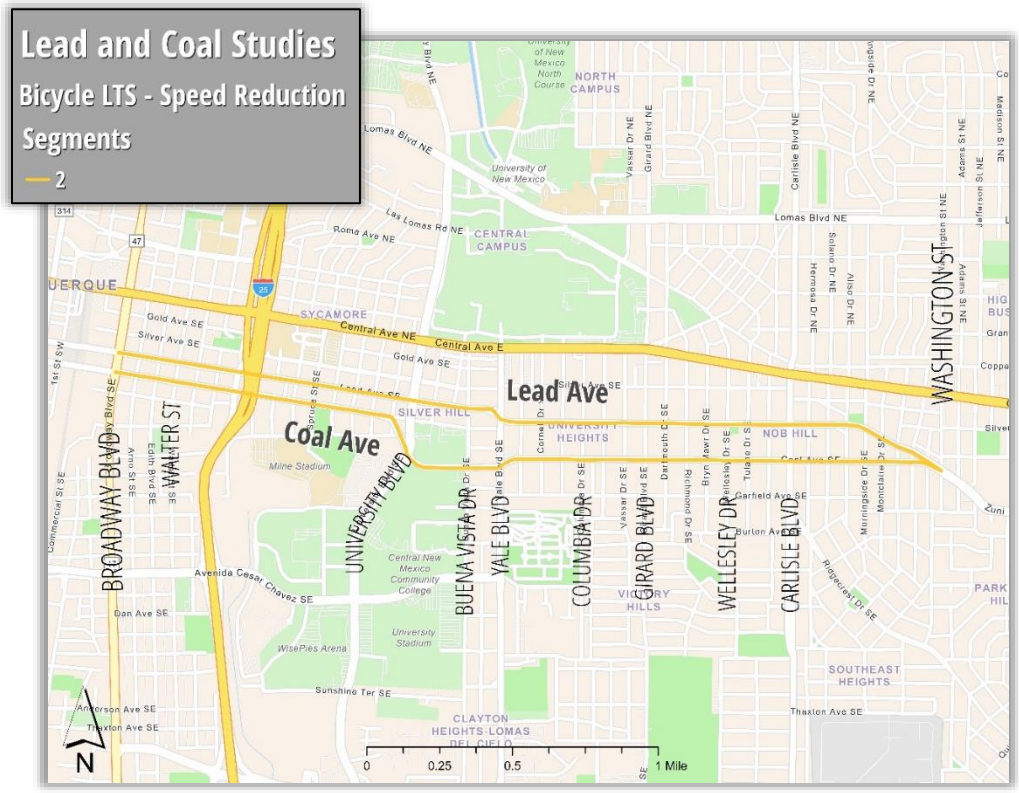


Figure 60: Bicycle LTS - Speed Reduction

Single-Lane BLTS

The BLTS for the Single-Lane alternative indicates that the entire corridor improves to a BLTS 1 due to a safer environment from greater space between motor vehicles and bicycles. However, this evaluation does not consider the safety hazard of motor vehicles using unused road space to erratically pass vehicles during congestion, which may become a safety challenge for bicyclists. Figure 61 shows the BLTS evaluation under the Single-Lane alternative.

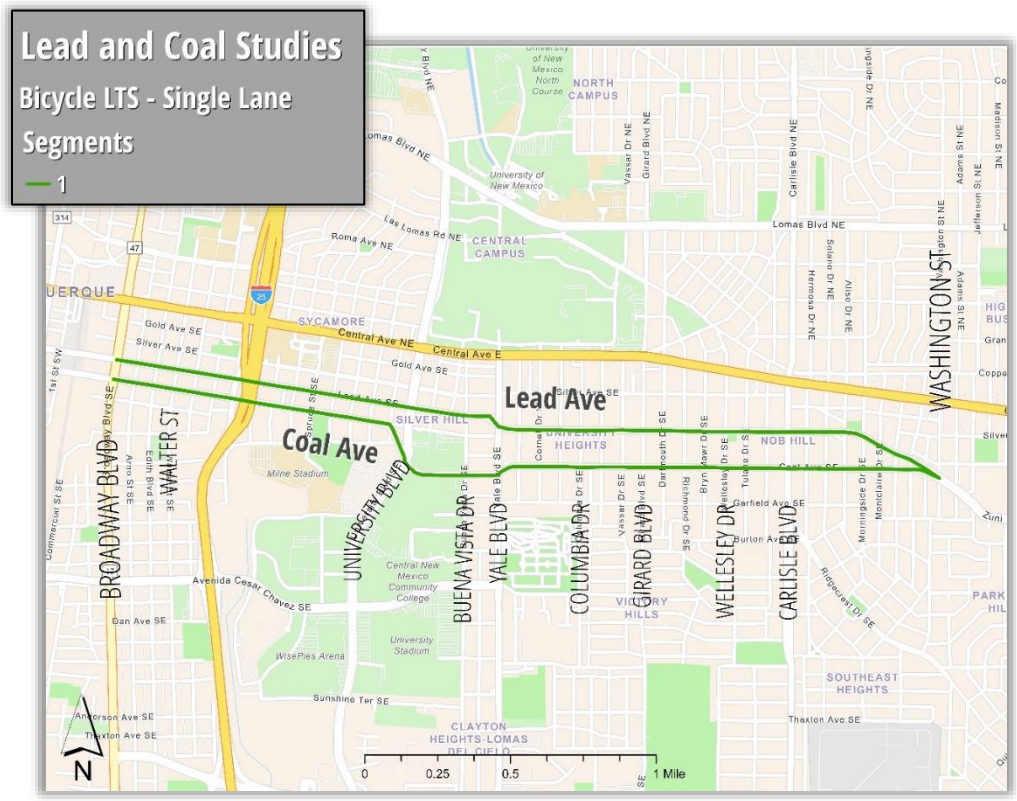


Figure 61: Bicycle LTS – Single-Lane

Two-Way BLTS

BLTS under Two-Way operations indicates that the corridor will be at BLTS 2. This is likely due to a negligible change to the bicycle facility and no increase in separation from motor vehicles. Figure 62 shows the BLTS evaluation under the Two-Way alternative.

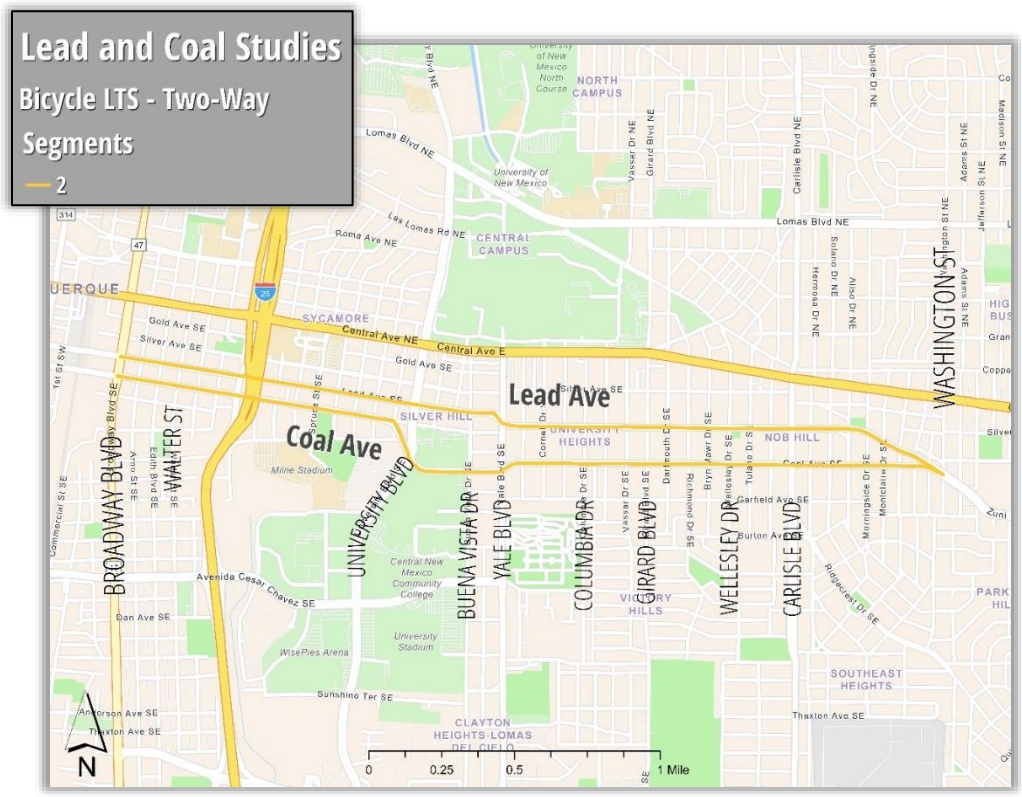


Figure 62: Bicycle LTS - Two-Way

ARTERIAL TRAVEL TIME

Arterial travel time is when it takes to travel a corridor from point A to point B. For Lead and Coal, arterial travel time is the time it takes a vehicle to travel from Broadway Boulevard to Washington Street and vice versa.

SEGMENT 1

Arterial travel times for the existing scenario were compared with the other scenarios. Table 19 summarizes the differences in travel times, starting with existing time and adding or subtracting time based on the scenario.

Table 19: Segment 1 Arterial Travel Times

Corridor	Scenario	Direction	AM Travel Time (mm: ss)	PM Travel Time (mm: ss)
Lead Ave	Existing	WB	1:25	1:35
	Speed Reduction	WB	+0:09	+0:05
	Single-Lane	WB	+0:35	+0:28
	Single-Lane - Yale to Washington	WB	-0:12	-0:02
	Two-Way	EB	-0:13	+0:27
		WB	+0:09	+0:08
Coal Ave	Existing	EB	1:53	2:05
	Speed Reduction	EB	+0:05	+0:08
	Single-Lane	EB	+0:57	+0:17
	Single-Lane - Yale to Washington	EB	-0:10	-0:14
	Two-Way	EB	-0:18	+0:19
		WB	+0:21	-0:16

Existing Arterial Characteristics

The AM and PM results indicate that the arterial characteristics are acceptable. Existing characteristics were also compared with other scenarios to determine how acceptable the delays and travel times would be.

Speed Reduction Arterial Characteristics

For Lead Avenue, there is a 10-second increase in the AM and an 18-second increase in the PM. For Coal Avenue, there is a 5-second increase in the AM and a 9-second increase in the PM.

Single Lane Operation Arterial Characteristics

For Lead Avenue, there is a 35-second increase in the AM and a 28-second increase in the PM. For Coal Avenue, there is a 57-second increase in the AM and a 17-second increase in the PM.

Single Lane Operation from Yale Boulevard to Washington Street

For Lead Avenue, there is a 12-second decrease in the AM and a 2-second decrease in the PM. For Coal Avenue, there is a 10-second decrease in the AM and a 14-second decrease in the PM.

Two-Way Operation Arterial Characteristics

For Lead Avenue in the eastbound direction, there is a 13-second decrease in the AM and a 27-second increase in the PM. For Lead Avenue in the westbound direction, there is a 9-second increase in the AM and an 8-second increase in the PM. For Coal Avenue in the eastbound direction, there is an 18-second decrease in the AM and a 19-second increase in the PM. For Coal Avenue in the westbound direction, there is a 21-second increase in the AM and a 16-second decrease in the PM.

SEGMENT 2

Arterial travel times for the existing scenario were compared with the other scenarios. Table 20 summarizes the differences in travel times, starting with existing time and adding or subtracting time, based on the scenario.

Table 20: Segment 2 Arterial Travel Times

Corridor	Scenario	Direction	AM Travel Time (mm: ss)	PM Travel Time (mm: ss)
Lead Ave	Existing	WB	2:34	2:39
	Speed Reduction	WB	+0:24	+0:20
	Single Lane	WB	+10:00	+5:00
	Single Lane – Add. Divers.	WB	+5:00	+3:00
	Single Lane - Yale to Washington	WB	+2:00	+1:00
	Two-Way	EB	-0:04	+0:51
		WB	+0:09	+0:23
Coal Ave	Existing	EB	2:48	4:12
	Speed Reduction	EB	+0:15	+1:00
	Single Lane	EB	+2:00	+4:00
	Single Lane – Add. Divers.	EB	+2:00	+3:00
	Single Lane - Yale to Washington	EB	-0:04	-0:17
	Two-Way	EB	-0:17	-1:00
		WB	+0:13	+1:00

Existing Arterial Characteristics

The AM and PM results indicate that the arterial characteristics are acceptable. Existing characteristics were also compared with other scenarios to determine how acceptable the delays and travel times would be.

Speed Reduction Arterial Characteristics

For Lead Avenue, there is a 26-second increase in the AM and a 29-second increase in the PM. For Coal Avenue, there is a 15-second increase in the AM and a 1-minute increase in the PM.

Single Lane Operation Arterial Characteristics

Initial Diversion

For Lead Avenue, there is a 10-minute increase in the morning and a 5-minute increase in the evening. For Coal Avenue, there is a 2-minute increase in the morning and a 4-minute increase in the evening.

Additional Diversion

For Lead Avenue, there is a 4-minute increase in the AM and a 3-minute increase in the PM. For Coal Avenue, there is a 2-minute increase in the AM and a 3-minute increase in the PM.

Single Lane Operation from Yale Boulevard to Washington Street

For Lead Avenue, there is a 2-minute increase in the AM and a 1-minute increase in the PM. For Coal Avenue, there is a 14-second decrease in the AM and a 17-second decrease in the PM.

Two-Way Operation Arterial Characteristics

For Lead Avenue in the eastbound direction, there is a 4-second decrease in the AM and a 51-second increase in the PM. For Lead Avenue in the westbound direction, there is a 9-second increase in the AM and a 23-second increase in the PM. For Coal Avenue in the eastbound direction, there is a 17-second decrease in the AM and a 1-minute decrease in the PM. For Coal Avenue in the westbound direction, there is a 13-second increase in the AM and a 1-second decrease in the PM.

SEGMENT 3

Arterial travel times for the existing scenario were compared with the other scenarios. Table 21 summarizes the differences in travel times, starting with existing time and adding or subtracting time, based on the scenario.

Table 21: Segment 3 Arterial Travel Times

Corridor	Scenario	Direction	AM Travel Time (mm: ss)	PM Travel Time (mm: ss)
Lead Ave	Existing	WB	3:38	4:08
	Speed Reduction	WB	+0:24	-0:22
	Single Lane	WB	+4:00	+0:54
	Single Lane – Add. Divers.	WB	+2:00	+0:65
	Single Lane - Yale to Washington	WB	+3:00	+1:00
	Two-Way	EB	-0:27	+0:38
		WB	-0:01	+2:00
Coal Ave	Existing	EB	+3:13	3:37
	Speed Reduction	EB	+0:00	+0:01
	Single Lane	EB	+0:05	+0:45
	Single Lane - Yale to Washington	EB	+0:11	+0:29
	Two-Way	EB	+0:15	+0:24
		WB	-0:05	+0:36

Existing Arterial Characteristics

The AM and PM results indicate that the arterial characteristics are acceptable. Existing characteristics were also compared with other scenarios to determine how acceptable the delays and travel times would be.

Speed Reduction Arterial Characteristics

For Lead Avenue, the AM is increased by 15 seconds, and the PM is decreased by 22 seconds. For Coal Avenue, the AM is increased by 20 seconds, and the PM is increased by 16 seconds.

Single Lane Operation Arterial Characteristics

Initial Diversion

For Lead Avenue, there is a 4-minute increase in the AM and a 54-second increase in the PM. For Coal Avenue, there is a 5-second increase in the AM and a 45-second increase in the PM.

Additional Diversion

In this segment, a diversion was only applied to Lead Avenue. For Lead Avenue, there is a 2-minute increase in the AM and a 1-minute increase in the PM. Though the secondary conversion provides less delay on the Lead and Coal corridors, it is essential to consider impacts on the surrounding roadways as traffic will likely divert to the closest corridors.

Single Lane Operation from Yale Boulevard to Washington Street

For Lead Avenue, there is a 3-minute increase in the AM and a 1-minute increase in the PM. For Coal Avenue, there is an 11-second increase in the AM and a 29-second increase in the PM.

Two-Way Operation Arterial Characteristics

For Lead Avenue in the eastbound direction, there is a 27-second decrease in the AM and a 38-second increase in the PM. For Lead Avenue in the westbound direction, there is a 1-second decrease in the AM and a 2-second increase in the PM. For Coal Avenue in the eastbound direction, there is a 15-second increase in the AM and a 24-second increase in the PM. For Coal Avenue in the westbound direction, there is a 5-second decrease in the AM and a 36-second increase in the PM.

NOISE ASSESSMENT

This noise assessment section is organized as follows. The first section discusses vehicle noise ordinances and other vehicle noise guidelines from Albuquerque and other jurisdictions to set a frame of reference for allowable vehicle noise levels. The data collection process discusses the findings in the following and third sections. The final section details different noise mitigation techniques and the pros and cons of each.

VEHICLE NOISE ORDINANCES AND GUIDANCE

First, Albuquerque's existing vehicle noise ordinance options are discussed. Then, examples of noise ordinances and vehicle noise guidance from other jurisdictions are discussed.

Vehicle Noise Ordinances for Albuquerque

Several ordinances are aimed at curtailing motor vehicle noise and apply to the City of Albuquerque. We first discuss those from the Albuquerque Code of Ordinances, including Albuquerque's Vehicle Nuisance Ordinance (Section 2.1.1.) and Albuquerque's Traffic Code (Section 2.1.2.). We then discuss the vehicle noise ordinance from the Bernalillo County Code (Section 2.1.3.). We finally discuss Albuquerque's general noise ordinance, which is likely inadequate for vehicle noise enforcement (Section 2.1.4.).

Albuquerque's Vehicle Nuisance Ordinance (Albuquerque Code of Ordinances; Chapter 7; Article 10)

The City of Albuquerque's Vehicle Nuisance Ordinance aims to improve the community's health and safety by prohibiting specific motor vehicle driving behaviors, including racing, drag racing, exhibition driving, road rage taunting, and other behaviors related to excessive roadway noise. The parts of the ordinance most applicable to road noise are provided below:

> § 7-10-2 FINDINGS AND INTENT.
>
> (B) The Council further finds that nuisance drivers' vehicles cause considerable property damage, bodily harm, and loss of life in the City of Albuquerque. The danger, noise, fear, and distraction produced and caused by nuisance drivers lead to immeasurable harm to the community. The noise and distraction generated by nuisance vehicles interfere with drivers' ability to detect and respond to dangerous or emergency driving conditions and circumstances, including but not limited to horn noise and the siren noise of official emergency vehicles. This Article aims to abate the nuisance caused by irresponsible drivers' use of cars by employing progressive sanctions, including temporary loss or permanent forfeiture of the vehicle.
>
> § 7-10-3 VEHICLE NUISANCE - SPECIFIC VIOLATIONS.
>
> (D) Excessively Loud Electronic Sound or Music. It shall be unlawful for any person or persons to play or produce excessively loud sound or music in any vehicle operated on any public street in the city limits. For purposes of this section, excessively loud electronic sound or music shall be, and the terms shall mean the use of any machine or device for reproducing sound, including any magnifying sound instrument used in the production or replication of music, spoken words, or other sounds and designed to enlarge the volume of any instrument, voice or other sounds including but not limited to radios, stereos or so-called "boom boxes." It shall be a violation of this section if any such sound is plainly audible twenty-five feet from the subject vehicle.

> (E) Modification of Exhaust Systems. It shall be a violation of this section for any person to operate any vehicle within city limits with a modified exhaust system. A modified exhaust system shall mean any change or alteration to the exhaust system found on the vehicle when it was originally manufactured, and such change results in noise that exceeds the noise the vehicle made when manufactured. Any violation of ROA 1994 § 8-6-13 shall also be a violation of this paragraph.

Mitigating excessive road noise from motor vehicles is a goal of the above ordinance. Based on results from the noise camera installation as part of this project and from other past noise camera monitoring around New Mexico, motor vehicle stereos rarely reach decibel levels that trigger the camera (approximately 80 dB(A) or greater), and almost all captures are a result of modified exhaust systems. Therefore, the city should likely focus on the exhaust system aspect of the Vehicle Nuisance Ordinance instead of the stereo aspect if they wish to maximize excessive motor vehicle noise enforcement. If the stereo aspect were enforced, what is "plainly audible" in decibels would likely need to be determined, as this is a subjective term. Furthermore, non-modified operating motor vehicles are plainly audible at twenty-five feet from the subject vehicle, primarily because of the contact between the vehicle's tires and the roadway; it may, therefore, be of interest to justify why a vehicle is allowed to be plainly audible at twenty-five feet, but the stereo is prohibited from being plainly audible at twenty-five feet.

The exhaust system portion of Albuquerque's Vehicle Nuisance Ordinance slightly differs from other vehicle noise ordinances that largely specify a maximum allowable decibel level. Instead, Albuquerque's ordinance specifies that vehicle exhaust systems are prohibited from making more noise than when they were originally manufactured. Enforcement of this ordinance should be possible if stock noise levels can be obtained from vehicle manufacturers. However, with a wide range of options available for motor vehicles, it may be challenging to identify the noise level of a vehicle's exhaust system when it was originally manufactured. For this reason, vehicle ordinances that specify maximum allowable decibel levels (such as Bernalillo County's Vehicle Noise Ordinance detailed in Section 2.1.3.) may be more appropriate.

Albuquerque's Traffic Code (Albuquerque Code of Ordinances; Chapter 8; Article 6)

The City of Albuquerque's Traffic Code has a section specifically requiring motor vehicles operated within city limits to have a muffler in good working order:

> § 8-6-13 MUFFLERS REQUIRED.
>
> (A) *Operating Muffler.* It shall be unlawful for any person to operate a motor vehicle if it is not equipped with a properly attached operating muffler in good working order of construction sufficient to prevent excessive or unusual noise of the motor or to muffle or deaden the sound from the motor.
>
> (B) *Muffler Changes or Modification.* No person shall modify or change the exhaust muffler, intake muffler, or any other noise abatement device of a motor vehicle such that the noise emitted by the motor vehicle is increased above that emitted by the motor vehicle as originally manufactured. Such prohibited changes or modifications shall include but are not limited to cut-outs, by-passes, illegal mufflers defined in division (C) below, or other similar devices.
>
> (C) *Dealers and the like.* No person shall sell, offer for sale, install, or offer to install any illegal muffler, exhaust cut-out, by-pass, or other device that increases or tends to increase the

> exhaust noise of a motor vehicle. For this section, an illegal muffler is defined as any straight-through muffler that does not contain baffles, including but not limited to glass packs, steel packs, and straight pipes.

Albuquerque's Traffic Code is similar to its Vehicle Nuisance Ordinance, focusing on muffler and exhaust systems. However, there is one key benefit to the Traffic Code's approach in that it is not required to prove that a modification has occurred. Whereas enforcement of the Vehicle Nuisance Ordinance would require proving that the vehicle's exhaust system had been modified, the Traffic Code states: "It shall be unlawful for any person to operate a motor vehicle if such vehicle is not equipped with a properly attached, operating muffler in good working order of construction sufficient to prevent excessive or unusual noise of the motor or to muffle or deaden the sound from the motor." In this way, enforcement should be possible without the additional burden of proving that an exhaust system has been modified from some previous state. However, the terms "excessive or unusual noise" are still subjective, and it would be ideal to have a specific decibel level associated with the criteria. Furthermore, it may need to be proven that the observed noise is generated explicitly because of a lack of a muffler.

Bernalillo County's Vehicle Noise Ordinance (Bernalillo County Code of Ordinances; Chapter 30; Article IV)

Bernalillo County has a vehicle noise ordinance that could be used by the City of Albuquerque and that avoids many of the issues detailed above:

> Sec. 30-123. - Vehicles.
>
> (b) Motor-driven vehicles. Motor-driven vehicle restrictions are as follows:
>
> (1) It shall be unlawful for any person to operate any motor-driven vehicle within the county in such a manner that a person residing in the area is caused discomfort or annoyance.
>
> (4) No person shall operate within the speed limits specified in this section either a motor vehicle or combination of vehicles of a type subject to registration at any time or under any condition of grade, load, acceleration, or deceleration in such manner as to exceed the following noise limits for the category of motor vehicles, based on a distance of not less than 50 feet from the centerline of travel under test procedures established by subsection (b)(10) of this section:

	Type of Vehicle	Noise Limit in Relation to Posted Speed Limit (dB(A))	
		35 mph or less	Over 35 mph
a.	Any motor vehicle with a manufacturer's GVW rating of 8,000 pounds or more and any combination of vehicles towed by such motor vehicle		
	Before January 1, 1973	88	90
	After January 1, 1973	86	90
b.	Any motorcycle other than a motor-driven cycle		
	Before January 1, 1978	82	86
	After January 1, 1978	78	82
c.	Any other motor vehicle and any combination of motor vehicles towed by such motor vehicle		
	After January 1, 1970	76	82

After January 1, 1978	70	79	

This section applies to the total noise from a vehicle or combination of vehicles and shall not be construed as limiting or precluding the enforcement of any other provisions of this Code relating to motor vehicle mufflers for noise control.

(10) Test procedures to determine whether maximum noise emitted by motor vehicles in use meet the noise limits stated in subsection (b)(4) of this section shall be in substantial conformity with standards and recommended practice established by the Society of Automotive Engineers, Inc., including SAE Standard J986; SAE Standard J331; Recommended Practice J366; Recommended Practice J184; and such other and further standards as may be propounded by the county department of environmental health.

Bernalillo County's Vehicle Noise Ordinance avoids many of the abovementioned issues with Albuquerque's ordinances. For instance, while both Albuquerque ordinances detailed above require the excessive noise to be coming from a muffler or exhaust system, Bernalillo County's noise ordinance states that: "No person shall operate…a motor vehicle… under any condition of grade, load, acceleration or deceleration in such manner as to exceed the following noise limits..." In this way, enforcement is possible as long as it can be proven that the noise is coming from the operating motor vehicle without requiring identification of the exact source (i.e., exhaust system, stereo, etc.).

The issue of defining the subjective terms "nuisance," "excessive," and "unusual" is also avoided by providing specific decibel ranges that can be measured objectively. Specific testing criteria are also provided to avoid ambiguity further.

Albuquerque's General Noise Ordinance (Albuquerque Code of Ordinances; Chapter 9; Article 9)

Although it is likely not ideal for enforcement of motor vehicle noise, we provide Albuquerque's General Noise Ordinance below:

§ 9-9-4 GENERAL NOISE.

(A) Except as otherwise provided in this article, no person shall make or continue, cause to be made or continued, or allow to be made or continued, any sound that persistently or continuously results in an exceedance of the following sound level limits using an approved sound-level meter measuring decibels on the A-Weighted scale.

	Receptor Premises					
Numbers indicate decibel (dB) levels	*Residential*		*Commercial and Downtown Arts and Entertainment Focus Area*		*Industrial/ Manufacturing and Public Premises*	
Source Premises	*Daytime*	*Nightti me*	*Daytime*	*Nighttime*	*Daytime*	*Nighttime*
Residential	55	50	65	60	75	70
Commercial and Downtown Arts and Entertainment Focus Area	55 (indoor) 60 (outdoor)	50 (indoor) 55 (outdoor)	65	60	75	70
Industrial/Manufacturing and Public Premises	55 (indoor) 60 (outdoor)	50 (indoor) 55 (outdoor)	65	60	75	70

A key issue with the general noise ordinance is that the sound must "persistently or continuously" meet the specified decibel levels. An operating motor vehicle may only meet those decibel levels briefly at any monitoring location before driving off. Furthermore, the decibel levels are low enough for most unmodified standard passenger vehicles to surpass them. Therefore, General noise ordinances are not tailored for enforcing excessive motor vehicle noise.

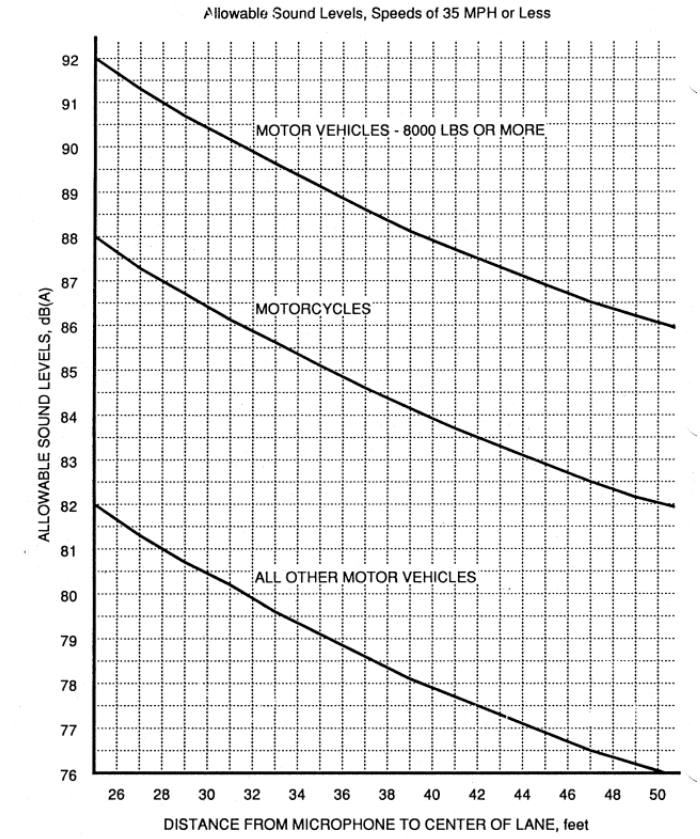
Other Vehicle Noise Ordinances and Guidance

Other jurisdictions with ordinances specific to vehicle noise are detailed below to provide context. This is not an exhaustive list.

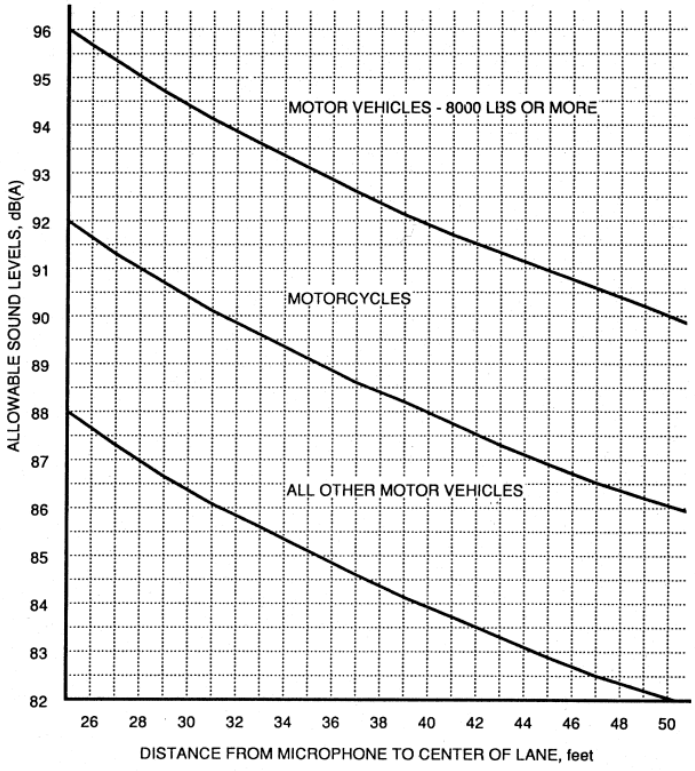
New York City Vehicle Noise Ordinance (The Rules of the City of New York; Title 15; Chapter 6)

The vehicle noise ordinance for New York City is detailed below to illustrate an alternative approach to one of the shortcomings of the Bernalillo County vehicle noise ordinance. Namely, the Bernalillo County vehicle noise ordinance specifies that sound level measurements must be "…based on a distance of not less than 50 feet from the centerline of travel…". This specification of not less than 50 feet from the centerline of travel might place the measurement device outside the right-of-way on many roadways. New York City provides tables of allowable decibel levels from a range of different measurement distances from 25 feet up to 50 feet, which is likely more practical for measurements on the side of a roadway. Note that the decibel thresholds at 50 feet specified by New York City are similar to those specified by Bernalillo County.

> Chapter 6: Interpolation of Allowable Sound Levels For Motor Vehicles
>
> Figure 1 and Figure 2 set forth below relate to allowable sound levels for motor vehicles as specified in § 24-232(a) of the Administrative Code (Noise Control Code). These figures shall be used for the interpolation between Column I and Column II of Table I of said section to determine the allowable sound levels for motor vehicles operated at speeds of 35 miles per hour or less and speeds of more than 35 miles per hour, respectively, at distances between twenty-five and fifty feet from the center of the lane of the public highway in which the motor vehicle is idling or is traveling.



SECTION 603 FIGURE 2:
Allowable Sound Levels, Speeds of More than 35 MPH



FHWA Traffic Noise Guidance

The guidance below is taken from the Federal Highway Administration's (FHWA) *Highway Traffic Noise: Analysis and Abatement Guidance*. Permissible noise emission levels per the Environmental Protection Agency (EPA) for individual vehicles (specifically trucks with gross vehicle weight ratings (GVRW) over 10,000 pounds) are first discussed. Then, general roadway noise levels representing Noise Abatement Criteria (NAC) from 23 CFR Part 772 are detailed.

The FHWA vehicle noise guidance that most closely relates to the local ordinances detailed above are the EPA regulations for trucks with GVRW over 10,000 pounds. No maximum noise levels for individual passenger vehicles or motorcycles are detailed in FHWA's *Highway Traffic Noise: Analysis and Abatement Guidance*. While Table 22 specifies maximum noise levels for newly manufactured trucks, Table 23 is likely more applicable to the local ordinances discussed above regarding "in-use" trucks. While a 50-foot measurement distance is again utilized, the EPA maximum noise levels appear more restrictive than the local ordinances detailed above. For instance, on roadways over 35 mph, Bernalillo County's ordinance allows vehicles with a GVRW of 8,000 pounds or more to emit a maximum of 90 dB(A). In contrast, the EPA allows vehicles with a GVRW of 10,000 pounds or more to emit a maximum of 87 dB(A).

*Table 22: Maximum Noise Emission Levels as Required by EPA for Newly Manufactured Trucks with GVWR Over 10,000 Pounds (Source: FHWA's Highway Traffic Noise: Analysis and Abatement Guidance) (*Using the Society of Automotive Engineers, Inc. (SAE) test procedure for acceleration under 35 mph))*

Effective Date	Maximum Noise Level 50 Feet from Centerline of Travel*
January 1, 1988	80 dB(A)

Table 23: Maximum Noise Emission Levels as Required by EPA for In Use Medium and Heavy Trucks with GVWR Over 10,000 Pounds Engaged in Interstate Commerce (Source: FHWA's Highway Traffic Noise: Analysis and Abatement Guidance)

Effective Date	Speed	Maximum Noise Level 50 Feet from the Centerline of Travel
January 8, 1986	<35 mph	83 dB(A)
	>35 mph	87 dB(A)
	Stationary	85 dB(A)

If a highway project is predicted to approach, meet, or exceed the NACs detailed in Table 24, FHWA recommends that noise abatement be considered and implemented if feasible and reasonable. The NACs are measured in Leq over an hour, which can be considered the average noise level over an hour. The Lead/Coal corridors likely fall under activity category B[3] with an exterior NAC of 67 dB(A).

Table 24: Noise Abatement Criteria from 23 CFR Part 772 in Hourly dB(A) Sound Levels (Source: FHWA's Highway Traffic Noise: Analysis and Abatement Guidance)

Activity Category	Activity Criteria		Evaluation Location	Activity Description
	Leq(h)	L10(h)		
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[3]	67	70	Exterior	Residential

C[3]	67	70	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55	Interior	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[3]	72	75	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	--	--	Undeveloped lands that are not permitted.

Noise Data Collection

We first detail the collection of decibel levels using sound level meters. We then detail the identification of vehicle types with a noise camera.

Decibel Level Data Collection with Sound Level Meters

Sound level meters were used to collect sound level measurements in A-weighted decibels (dB(A)) at eight locations along the Lead/Coal corridor: Lead & Solano (location #1 in Figure 63), Lead & Tulane (#2), Lead & Cornell (#3), Lead & Buena Vista (#4), Lead & Mulberry (#5), Lead & Edith (#6), Coal & Cornell (#7), and Coal & Amherst (#8). The sound level meters were installed approximately 15 feet above ground level on utility poles located as closely as possible to the locations noted in Figure 63. Collections were taken for about 53 hours between approximately 8:00 AM on Tuesday, September 24, 2024, and 1:00 PM on Thursday, September 26, 2024.

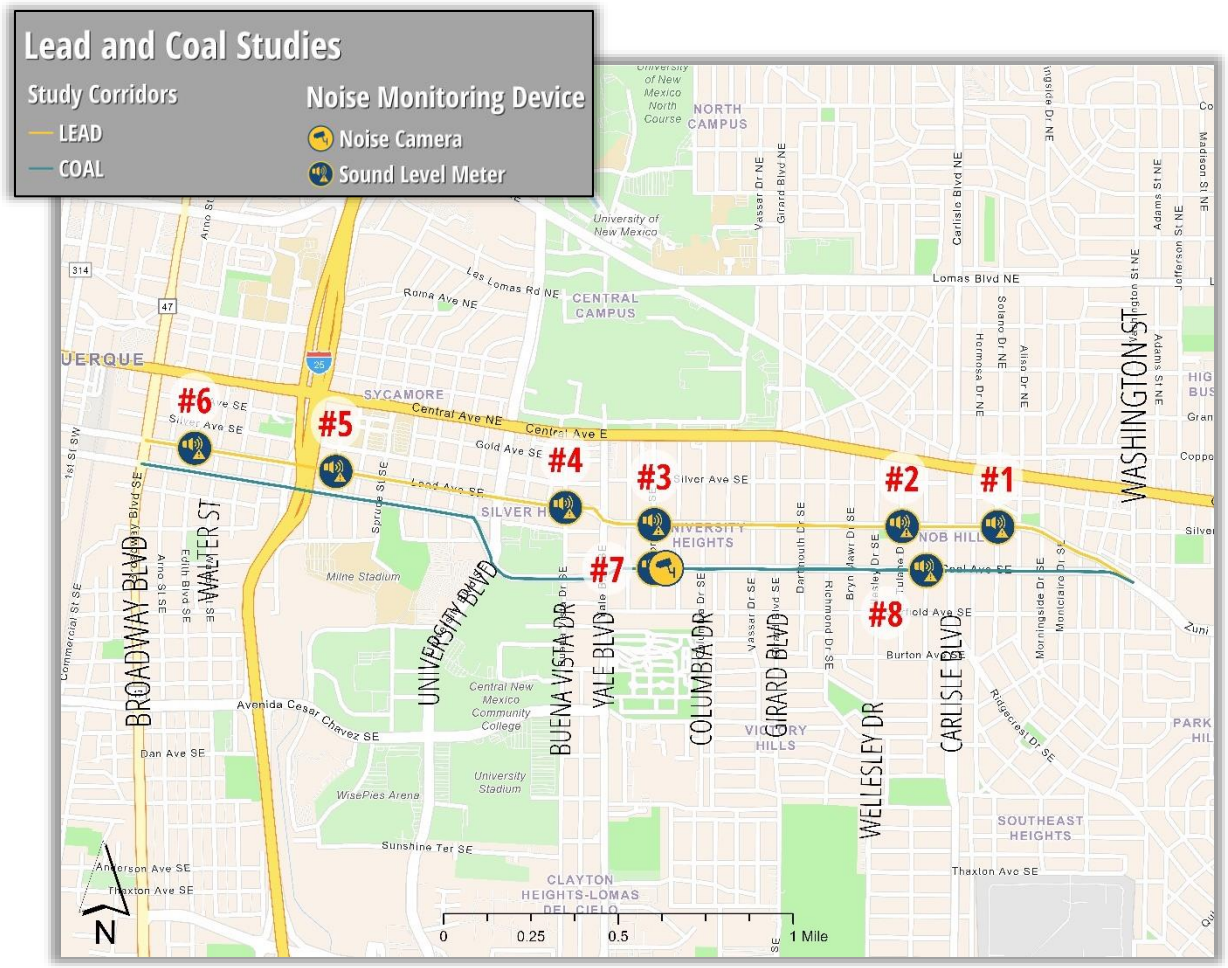


Figure 63: Lead/Coal Avenue Sound Level Monitoring Locations

REED R8070SD Data Logging Sound Level Meters were utilized for noise monitoring. These meters are certified to Type 2 standards (± 1.0 dB) according to IEC 61672-1-2013. The sound level meters were calibrated immediately before deployment in the field and were confirmed to still be within ±0.1 dB(A) when uninstalled. Each sound level meter recorded one dB(A) reading every second throughout the study period.

The data was then processed to identify the number of high-noise events (e.g., noise events above 80 dB(A) and noise events above 90 dB(A)) at each monitoring location, as well as the average decibel levels throughout the study period. Distinct noise events were differentiated using a four-second gap. In other words, take as a hypothetical situation that a single loud vehicle driven by a sound level meter produced decibel readings above 80 dB(A) for six seconds, which would result in six readings above 80 dB(A). Instead of counting this as six high-noise events, we counted all immediately subsequent ≥80dB(A) readings as a single event until there was a gap of at least four seconds between ≥80dB(A) readings.

It should be noted that while sound level meters can record decibel levels, they cannot identify the noise source. In other words, while the sound level meters identified high-noise events along the study roadways, and one could reasonably assume that those high-noise events may be primarily caused by

operating motor vehicles, it is possible that some of the high-noise events recorded by the sound level meters were caused by other noise sources (e.g., gunshots, leaf blowers, etc.). Because of the inability of sound level meters to identify noise sources, a noise camera was also installed in the corridor.

Vehicle Type Identification with Noise Camera

A noise camera was also installed during the monitoring period between approximately 11:00 AM on Tuesday, September 24, 2024, and 1:30 PM on Thursday, September 26, 2024. The noise camera was installed on Coal Avenue between Cornell Drive SE and Stanford Drive SE, approximately 24 feet from the centerline of the traveled way and within 300 feet of monitoring location #7 from Figure 63.

The noise camera consisted of a camera that was triggered whenever an 80 dB(A) threshold was surpassed. The camera's video capture and noise source localization allowed for identifying the noise source for each high-noise event during the study period. If the noise source was a motor vehicle, the vehicle type (e.g., heavy vehicles, pickup trucks, motorcycles, sports cars, etc.) of the noise source could be identified in the video capture. The license plate camera was not enabled during this study to avoid privacy issues. Identifying the vehicle type will inform whether further enforcement of truck restrictions may help improve noise pollution along the corridors.

Findings

We first discuss findings from the sound level meters, namely the average decibel levels and the number of high-noise events. We then discuss the identification of the noise sources using the noise cameras.

Sound Level Meter – Decibel Level Results

Average Traffic Noise Levels

While noise levels averaged across all times of day did not exceed or approach FHWA's noise abatement criteria of 67 dB(A) for residential areas (Table 24), the noise abatement criteria were exceeded or approached (i.e., within 1.0 dB(A)) during the loudest hour of the day at four of the eight study locations (Table 25). The westernmost parts of the study corridor, such as Lead & Mulberry and Lead & Edith, had the highest average noise levels.

Table 25: Average Noise Levels in dB(A)
(values approaching or exceeding FHWA's noise abatement criteria in bold)

Location	Total	Day 07:00-19:00	Night 19:00-07:00	Loudest Hour	
				dB(A)	Start Time
Lead & Solano	57.1	61.6	51.7	65.1	8:23:07 AM
Lead & Tulane	57.8	62.6	52.0	65.9	7:22:49 AM
Lead & Cornell	59.4	63.6	54.2	**67.3**	7:16:07 AM
Lead & Buena Vista	57.2	61.2	53.0	64.3	7:30:49 AM
Lead & Mulberry	61.9	64.9	58.2	**68.1**	7:09:35 AM
Lead & Edith	59.8	64.0	54.9	**68.7**	7:35:42 AM
Coal & Cornell	58.7	63.4	53.0	**66.1**	7:32:16 AM
Coal & Amherst	56.5	59.8	51.5	62.5	7:34:11 AM

High-Noise Events

The number of observed high-noise events along the study corridor is detailed in Table 26**.** Findings are presented as the rate of minutes per event for ≥80 dB(A) noise events and the rate of hours per event for ≥90 dB(A) noise events. For example, the results can be interpreted as one ≥80 dB(A) noise event

observed every 4.0 minutes during the day at the Lead & Solano monitoring location. The 80 dB(A) threshold is roughly equivalent to the legal limit for motor vehicles with a gross vehicle weight (GVW) rating of less than 8,000 pounds (excluding motorcycles, which have a higher noise limit) in Bernalillo County. It is important to note that while many high-noise events are likely a result of motor vehicles, the noise source cannot be substantiated by sound level meter readings alone.

Table 26: High-Noise Event Rates

Location	≥80 dB(A) rate of *minutes/event*			≥90 dB(A) rate of *hours/event*		
	Total	**Day 07:00-19:00**	**Night 19:00-07:00**	**Total**	**Day 07:00-19:00**	**Night 19:00-07:00**
Lead & Solano	6.2	4.0	18.7	2.1	1.3	8.0
Lead & Tulane	19.6	12.6	60.0	7.6	4.8	24.0
Lead & Cornell	13.5	8.9	36.0	7.6	5.8	12.0
Lead & Buena Vista	29.6	20.4	57.6	4.2	3.2	6.0
Lead & Mulberry	9.9	6.9	20.3	2.5	2.2	3.0
Lead & Edith	11.3	7.8	24.0	2.2	1.5	4.8
Coal & Cornell	16.0	10.6	42.4	4.1	2.7	12.0
Coal & Amherst	14.2	9.8	45.8	3.3	2.0	na

As with the average noise levels detailed above, the western end of the study corridor experienced some of the worst rates of high-noise events (Table 26). For example, Lead & Mulberry and Lead & Edith experienced an ≥80 dB(A) noise event every 6.9-7.8 minutes throughout the day. However, the worst section was Lead & Solano, which experienced an ≥80 dB(A) noise event every 4.0 minutes throughout the day. High-noise events were less frequent at night, although the worst sections of the corridor still experienced an ≥80 dB(A) noise event every 18.7-24.0 minutes throughout the night.

The worst parts of the corridor for ≥90 dB(A) noise events experienced one such event every 1.3-2.2 hours throughout the day (Table 26). Four monitoring locations experienced a ≥90 dB(A) noise event every 8.0 hours or less at night, meaning at least one such event every night.

Noise Camera – Vehicle Identification Results

Of the 171 total triggers of ≥80 dB(A) over the approximately 50.5 hours that the noise camera was installed, 157 (91.8%) triggers were caused by a motor vehicle in the study corridor (Figure 64). The 14 (8.2%) other triggers were either caused by a motor vehicle on another road (7 or 4.1%) or an unknown source (7 or 4.1%).

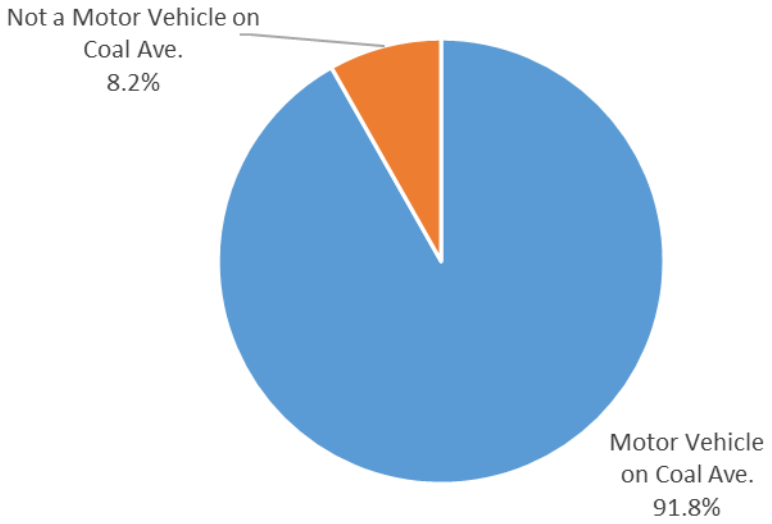


Figure 64: Noise Sources for Noise Camera Triggers of ≥80 dB(A) on Coal Avenue

Of the 157 triggers caused by motor vehicles, the most frequent vehicle type was pickup truck with 51 cases (32.5%), followed by motorcycle (36 cases or 22.9%), passenger car (19 cases or 12.1%), and SUV (17 cases or 10.8%) (Figure 65). It is important to note that Bernalillo County's vehicle noise ordinance specifies that on roads with speed limits of 35 mph or less (which includes the study location on Coal Avenue), any motor vehicle with a manufacturer's GVW rating of 8,000 pounds or more is allowed to generate up to 86 dB(A), motorcycles are allowed to generate up to 78 dB(A), and all other motor vehicles are allowed to generate up to 70 dB(A) at fifty feet. Therefore, some of the captured pickup trucks and motorcycles may be within their legal noise limits; further identification of individual vehicle weight characteristics would be required to determine the legal status of any individual vehicle.

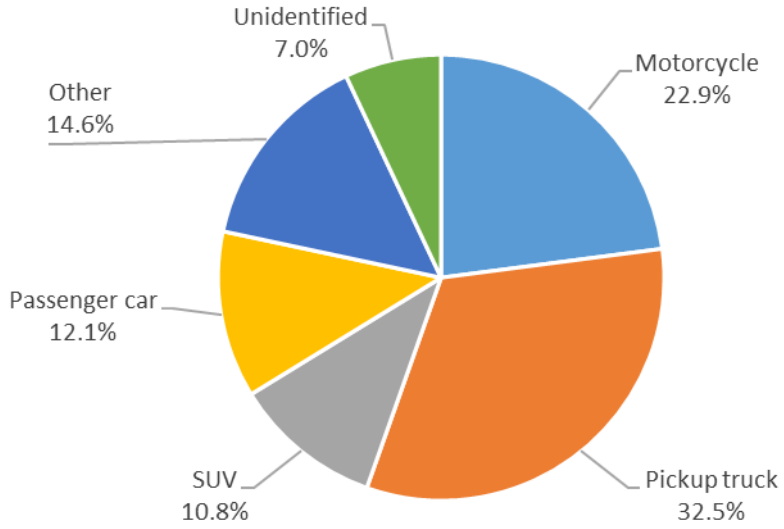


Figure 65: Vehicle Type for Motor Vehicles Triggering the Noise Camera at ≥80 dB(A) on Coal Avenue

The "Unidentified" category in Figure 65 included 11 (7.0%) unidentified captures, consisting of motor vehicles that were too tightly platooned to identify which vehicle was generating the high-noise event. The "Other" captures in Figure 65 included box trucks (a count of 4 or 2.5% of the total motor vehicles captured; box trucks consisted of rentals such as U-Haul and Penske), city buses (2 or 1.3%), fire trucks (2 or 1.3%), food truck (1 or 0.6%), front loader (1 or 0.6%), police cars (4 or 2.5%), school buses (4 or 2.5%), tow trucks (2 or 1.3%), and trash trucks (3 or 1.9%).

The private vehicles likely violating the 5-ton truck restriction at the study location were the four box trucks, one food truck, and two tow trucks for seven private vehicles or 4.5% of the total motor vehicles captured. The non-emergency municipal vehicles that likely weighed more than five tons were the two city buses, four school buses, and three trash trucks, for nine non-emergency municipal vehicles, or 5.7% of the total motor vehicles captured.

Motorcycles were disproportionately loud in the captured sample. Of the 16 motor vehicles that were captured at ≥90 dB(A), ten (62.5%) were motorcycles. There were also two pickup trucks (12.5%), two passenger cars (12.5%), and four police cars (25.0%) captured at ≥90 dB(A). All motorcycles that were captured had an average of 85.3 dB(A) versus an average of 82.9 dB(A) for passenger cars, 82.2 dB(A) for pickup trucks, and 81.2 dB(A) for SUVs.

Noise Mitigation Techniques

The guidance below regarding noise mitigation techniques was largely based on FHWA's *Highway Traffic Noise: Analysis and Abatement Guidance*. Traffic noise abatement techniques approved by FHWA include noise barriers, managing traffic (including truck restrictions), vegetation, and installing noise insulation in buildings. Note that while the guidance is for highways, applying techniques to urban areas is discussed and, therefore, may apply to the study.

Noise Barriers

Noise barriers are the most prevalent form of noise abatement. Noise barriers are solid obstructions built between the roadway and the noise receivers. Effective noise barriers can reduce noise levels by 10 decibels. While noise barriers may effectively mitigate noise, they are inappropriate in all contexts. FHWA details context considerations that are likely applicable to the Lead/Coal corridor:

> "A major consideration in the design of a noise barrier is the visual impact on the adjoining land use. An important concern is the scale relationship between the barrier and activities along the roadway right-of-way. A tall barrier near a low-scale single-family detached residential area could have a severe adverse visual effect. In addition, a tall barrier placed close to residences could create detrimental shadows. One solution to the potential problem of scale relationship is to provide staggered horizontal elements to a noise barrier to reduce the visual impact through the introduction of landscaping in the foreground. This can also allow for additional sunlight and air movement in the residential area. In general, it is desirable to locate a noise barrier approximately four times its height from residences and to provide landscaping near the barrier to avoid visual dominance."

Given the limited right-of-way along the Lead/Coal corridor and the residential context, noise barriers are likely not a realistic solution for noise abatement.

Traffic Control (Including Truck Restrictions)

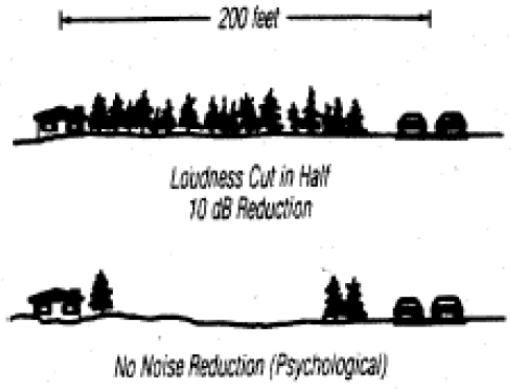
FHWA also recommends traffic control methods for noise mitigation, including:

1. Prohibiting trucks from certain streets and roads,
2. Permitting trucks to use certain streets and roads only during daylight hours,
3. Timing traffic lights to achieve smooth traffic flow and eliminate the need for frequent acceleration and deceleration,
4. Reducing speed limits reduces traffic noise levels; however, an approximate reduction of 20 mph is necessary for a readily perceptible decrease in noise levels.

Given the findings above from the noise cameras regarding the relatively few motor vehicles violating the existing truck restrictions, further truck restrictions or further enforcement of existing truck restrictions will likely not significantly ameliorate the noise issues observed on the Lead/Coal corridor. The noise issues observed at the study site were not related to signal timing, and further reducing the speed limit by the recommended 20 MPH was not feasible in the study corridor. Therefore, the traffic control noise mitigation techniques suggested by FHWA are likely not applicable solutions for the observed Lead/Coal noise issues.

Vegetation

FHWA suggests vegetation as a possible noise mitigation technique, although they note that vegetation is infrequently feasible given the width and density of vegetation required to dampen noise. For instance, FHWA estimates that a 200-foot width of dense vegetation would be required to reduce noise by 10 decibels (Figure 66). Planting trees and shrubs may provide psychological benefits by providing visual screening, but it typically does not function as noise abatement. Vegetation is, therefore, not a feasible noise mitigation technique for the Lead/Coal corridor.



Source: FHWA Highway Traffic Noise: Analysis and Abatement Guidance

Figure 66: Vegetation as Noise Mitigation Technique

Noise Insulation

The final noise mitigation technique suggested by FHWA is noise insulation installed directly on or in affected buildings. However, FHWA notes that highway agencies typically only consider noise insulation for public use or nonprofit institutional structures (e.g., places of worship, schools, hospitals, libraries,

etc.). Directly modifying private residences is not a standard procedure and is likely not a noise mitigation approach that is pertinent for a city. Therefore, it is likely that none of the above standard noise mitigation techniques detailed by FHWA are appropriate to the Lead/Coal corridor.

Automated Noise Enforcement

Although not mentioned by the FHWA, automated noise enforcement via noise cameras may be an effective approach for the Lead/Coal corridor. Noise cameras, such as the unit used for vehicle type identification in this study, constantly measure decibel levels along a roadway and are triggered when a set decibel threshold is surpassed. The noise camera can localize the noise source to confirm which motor vehicle is generating the offending noise and identify the individual vehicle via a license plate camera. In addition, decibel levels and audio are recorded throughout each capture to provide additional evidence.

Noise cameras are a relatively new technology and are not yet widely used in the United States. New York City is the only known municipality issuing citations based on noise camera data, although several other cities have completed noise camera pilot programs. To successfully mitigate vehicle noise along the Lead/Coal corridor with noise cameras, the city would need to issue warnings or citations to vehicle owners violating any of the applicable ordinances detailed above.

ENHANCED SAFETY OPTIONS

Additional safety countermeasures may be selected alone or paired with other countermeasures to enhance safety in the corridors beyond those recommended in the RSA. These countermeasures include:

- Speed Mitigations
    - Reduced Speed Limit (25 MPH) in Primary Residential Areas
    - Narrow Driving Lanes to 10 feet
    - Intersection Gateway Treatments
    - 8-inch Edge Line Lane Striping
- Left-turns from Right-lane (Vice Versa)
    - Install Thru-Left and Thru-Right Combo Arrow Pavement Markings
    - Solid White / Double Solid White Center Stripes on Intersection Approaches
- Red Light Running
    - Reflective Signal Head Backplates
    - Advanced Vehicle Detection and 'Red Protect' Operations
- Additional Safety Features
    - Bicycle Lane Buffer
    - Vertical Elements in Bicycle Lane Buffer
    - Green Bicycle Conflict Area Paint
    - Daylighting on side streets to define intersections

This section describes these countermeasures. Figure 67 depicts a typical section concept showing several enhanced safety countermeasures.

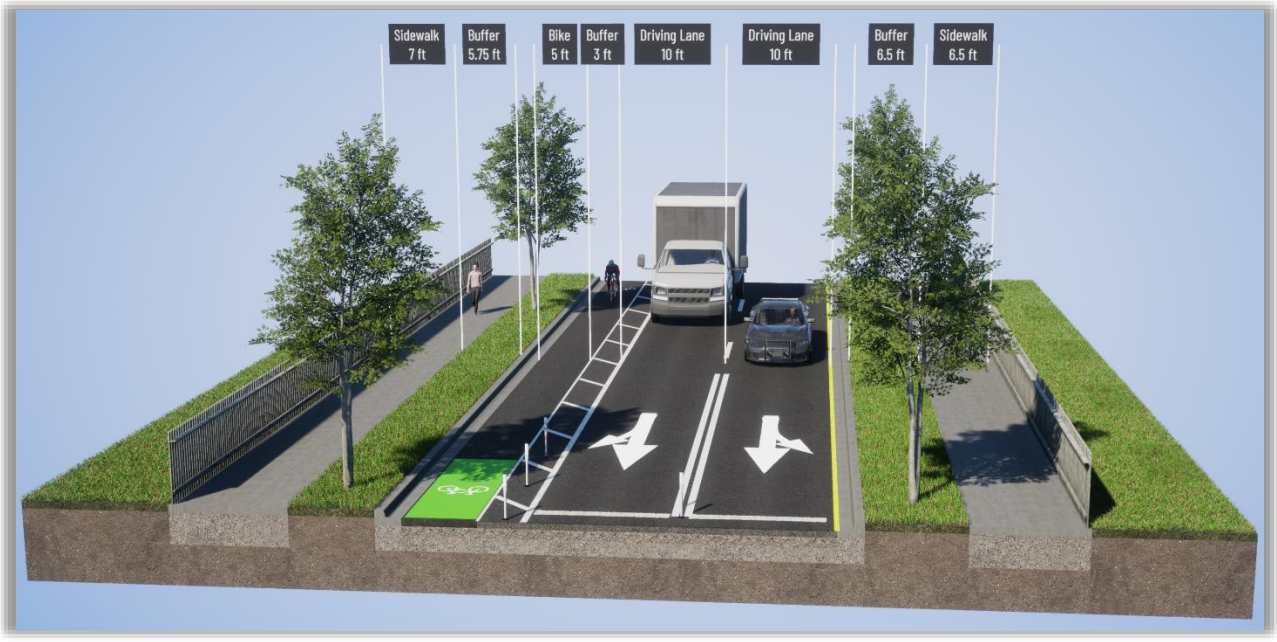


Figure 67: Typical Section w/ Enhanced Safety Features at Intersection Approach

Speed Mitigations

Reduced Speed Limit (25 MPH) in Primary Residential Areas

Lowering the speed limit to 25 MPH may reduce the kinetic energy involved in a crash on Lead and Coal Avenues; this is subject to speed limit compliance by motorists. By slowing vehicles down, motorists have more time to react to unexpected situations, increasing their ability to avoid crashes. Lower speeds also reduce the required stopping distance, minimizing the risk of collisions. The combined effect of reduced impact force and increased reaction time makes the lower speed limit critical in creating safer roads for everyone. Reducing the speed limit is low-cost and can be implemented quickly. Still, it should be considered with other countermeasures since arbitrarily lowering the posted speed limit will not yield the desired impact on driver behavior.

Dynamic Speed Feedback Signs

Dynamic Speed Feedback Signs include radar that captures and displays the approaching vehicle's speed. They may be solar-powered, which can reduce the cost of powering the sign. However, it is recommended that consistency in the placement of the Speed Feedback signs be maintained to prevent speeds from rebounding once the signage ends. Figure 68 depicts the configuration of a Speed Feedback Sign.

Figure 68: Speed Feedback Sign Configuration

Narrow Driving Lanes to 10 feet

Lane width and motor vehicle speed are related. Narrower lanes aim to slow vehicle speeds and increase speed limit compliance. As shown in **Figure 69**, narrower lanes tend to reduce vehicle speeds at a rate of 3 MPH for every foot reduction in driving lane width[1].

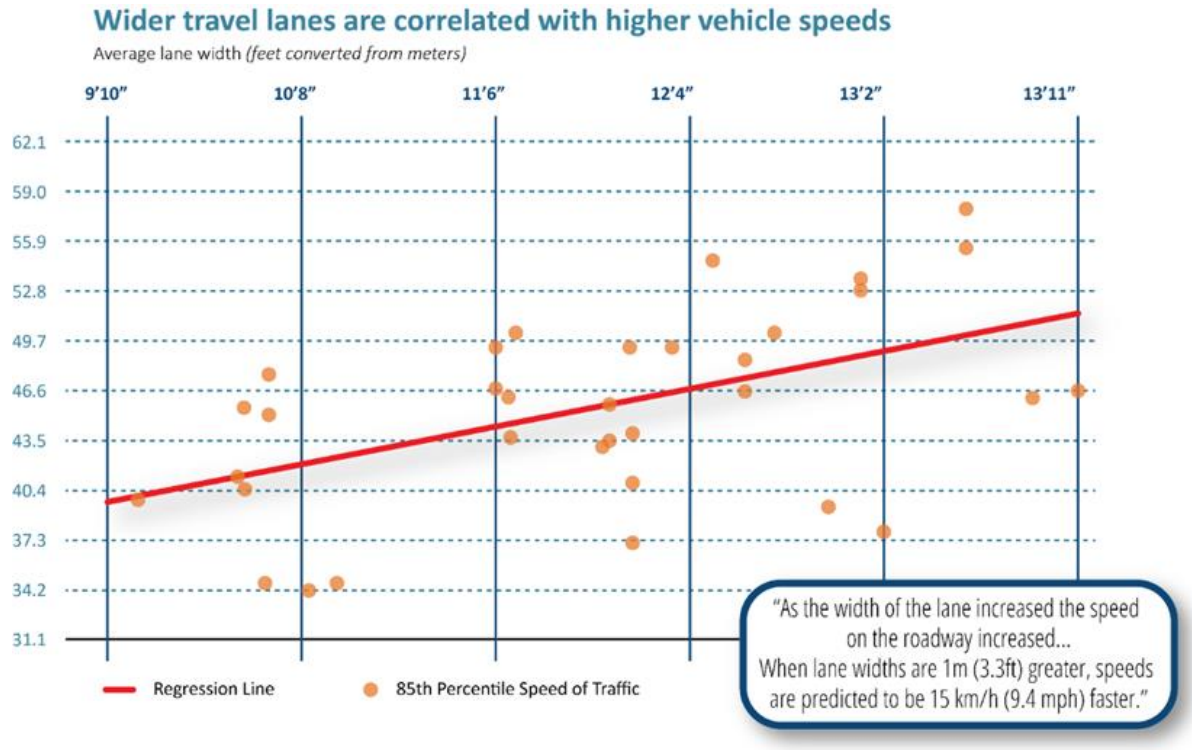


Figure 69: Average Lane width by 85th Percentile speed– Adapted from https://nacto.org/wp-content/themes/sink_nacto/views/design-guides/retrofit/urban-street-design-guide/images/lane-width/wider-travel-lanes-graph.png

Intersection Gateway Treatments

Delineator posts are vertical elements that guide motorists or restrict the travel path. They may include a strip of reflectorized plastic to increase visibility in low-light conditions. For the Lead and Coal corridors, vertical elements may encourage motorists to slow down by adding to the road's visual friction and highlighting the lane's narrowness. Additionally, they create a perceived barrier to crossing the centerline. This measure aims to create a safer environment by encouraging more cautious driver behavior. Vertical centerline elements contribute to a safer road environment by calming traffic and discouraging unsafe vehicle maneuvers. Motor vehicles often damage vertical elements and may lead to undesirable maintenance costs.

6-inch Lane Striping

Wide lane striping can aid driver awareness and emphasize roadway delineation by enhancing the visibility of travel lane boundaries. Lane striping with a six or eight-inch width is considered wide. They can provide a safety benefit to all facility types. Additionally, wide lane striping may provide better guidance for autonomous vehicles. Furthermore, wide lane striping may increase the narrow

[1] Fitzpatrick et al., "Design Factors That Affect Driver Speed on Suburban Arterials."

appearance of a travel lane. To distinctly demarcate the bicycle facility, wide striping is recommended between bicycle lanes (and bicycle lane buffers) and motor vehicle lanes, and to highlight intersections, wide lane striping is recommended at unsignalized intersection approaches.

Left-Turns from Right-Lane (Vice Versa)

Install Thru-Left and Thru-Right Combo Arrow Pavement Markings

Thru-left and Thru-right combo arrow pavement markings on a one-way street enhance safety by guiding motorists on their permitted movements, minimizing confusion and potential conflicts at intersections. These markings help prevent last-minute lane changes by communicating the allowed vehicle movements. Additionally, they may reduce the risk of sideswipe and rear-end collisions by ensuring predictable driver behavior.

Solid White / Double Solid White Center Stripes on Intersection Approaches

Solid /Double solid white center stripes at an intersection approach may enhance safety by delineating the traffic lanes. These markings help maintain predictable and organized traffic flow by reinforcing lane geometry. They also improve driver awareness by visually reinforcing an intersection and the need to be in the appropriate for the motorists' desired movement designated lane as they approach the intersection. By preventing erratic lane shifts, this striping may contribute to a more predictable driving environment, enhancing safety for all road users.

Red Light Running

Reflective Signal Head Backplates

Reflective signal backplates enhance the visibility of traffic signals, making them much easier to see, especially under low-light conditions. Think of them like high-visibility vests for traffic signals. By catching and reflecting headlight beams, they grab a driver's attention sooner and highlight an upcoming intersection. This extra visibility reduces confusion and the likelihood of red light running. Ultimately, this countermeasure can make intersections safer for motorists, pedestrians, and bicyclists by improving traffic signals' clarity and conspicuity. This countermeasure is one of FHWA's Proven Safety Countermeasures that may reduce all crash types by up to 15%[2].

Advanced Vehicle Detection and 'Red Protect' Operations

Advanced Vehicle Detection and 'Red Protect' operations can enhance signalized intersection safety by using technology to detect approaching vehicles and adjust traffic signals accordingly, reducing the likelihood of red-light running and crashes. Advanced vehicle detection can extend the green duration for vehicles that may be forced into sudden stops, preventing rear-end crashes. It also prioritizes cross-traffic and pedestrian safety by ensuring signals respond dynamically to current traffic conditions. The 'Red Protect' feature enhances safety by holding the red light for conflicting movements when a potential hazard is detected, reducing the risk of side-impact or T-bone collisions. These technologies may create a safer environment by minimizing unexpected conflicts.

[2] Sayed, T., Leur, P., and Pump, J., "Safety Impact of Increased Traffic Signal Backboards Conspicuity."

Additional Safety Features

Bicycle Lane Buffer

The corridors' existing conditions include bicycle lanes. Enhancing the existing facilities with a buffer and reducing the travel lane width would provide additional separation from motor vehicles.

Vertical Elements in Bicycle Buffer

Vertical elements can be used to highlight conflict points at intersections.

Green Bicycle Boxes

Green bicycle box pavement markings highlight conflict points at intersections.

Daylighting on side streets to define intersections

Daylighting refers to removing visual obstructions such as parked cars, signs, or overgrown vegetation near intersections, crosswalks, and driveways to improve visibility between road users. Daylighting treatments on local streets that intersect with collectors or arterials can act as a gateway treatment and communicate a transition between road environments, encouraging slower turning speeds and tighter curb radii. Daylighting may be accomplished using paint and post or curb extensions. Daylighting may aid with speed limit compliance and create a safer road environment on minor street north and south approaches at Lead and Coal Avenues.

COST ESTIMATES

Lee Engineering completed a preliminary cost estimate for each scenario and an additional Enhanced Safety Option. Each scenario includes the work required, coordination costs, and a 20% contingency. Table 27 summarizes the cost for each option.

Table 27: Cost Estimates

Scenario	Segment	Cost
Speed Reduction	1	$30,000
	2	$40,000
	3	$40,000
	Grand Total	**$110,000**
Single Lane Operation	1	$175,000
	2	$340,000
	3	$510,000
	Grand Total	**$1,025,000**
Single Lane Operation from Yale to Washington	1	$0
	2	$0
	3	$580,000
	Grand Total	**$580,000**
Two-Way Operation	1	$685,000
	2	$1,020,000
	3	$1,100,000
	Grand Total	**$2,805,000**
Enhanced Safety Option	1	$195,000
	2	$370,000
	3	$560,000
	Grand Total	**$1,125,000**

Speed Reduction

Additional signage, speed feedback signs, and rubber curb segments are costs associated with reducing speed. The total for all three segments is $110,000.00.

Single Lane Operation

Costs associated with reducing to one lane include striping, additional signage, speed feedback signs, channelizer posts, rubber curb segments, and minor street daylighting. The total for all three segments is $1,025,000.00.

Single Lane Operation from Yale Boulevard to Washington Street

Costs associated with reducing to one lane from Yale Boulevard to Washington Street include striping, additional signage, speed feedback signs, channelizer posts, rubber curb segments, and minor street daylighting. The total for all three segments is $580,000.00.

Two-Way Operation

Costs associated with converting into a two-way operation include striping, additional signage, speed feedback signs, channelizer posts, rubber curb segments, additional traffic signal mast arms and adjustments, and minor street daylighting. The total for all three segments is $2,805,000.00.

Enhanced Safety Option

Costs associated with the enhanced safety option include restriping, additional signage, speed feedback signs, channelizer posts, rubber curb segments, and construction costs. The total for all three segments is $1,125,000.00. Although this option is separate from the rest, many features can be added to other alternatives to further enhance safety in the Lead and Coal corridors.

SUMMARY STATEMENTS

This study was completed to supplement the 2022 Road Safety Audit (RSA) conducted by the Federal Highway Administration (FHWA). The RSA identified 19 recommendations to enhance safety; four initiatives were advanced and formed the foundational scope used herein.

This report is provided to the Lead and Coal Working Group, which was established in November of 2022. The data and analysis provided herein aim to aid in decision-making by residents, the Mayor's administration, the City of Albuquerque's Department of Municipal Development, the District 6 City Councilor, and the Albuquerque Police Department.

This study builds on the RSA by providing a detailed analysis of the four initiatives:

- Reducing the Posted Speed Limit to 25 MPH,
- Single-lane Operation,
- Two-way Operation and a
- Noise Assessment.

This report documents the study's findings to guide the Lead and Coal Working Group in making informed, data-driven decisions about the future of these corridors. As such, this report is not intended to provide recommendations but to provide insight into the pros and cons of the alternatives, provide additional crash data insight, and prepare cost estimates for the Lead and Coal Taskforce and the encompassing Working Group's use. A decision matrix tool was developed to assist the Taskforce and Working Group in reviewing the alternatives, as shown in Table 28 below.

Stopping short of recommendations, the project team offers the following insights:

- Speed reduction most applies to the residential areas west of the I-25 and east of Yale.
    - A speed reduction from I-25 to Yale is viable, but the trade-offs in connectivity to the hospital and university areas should be recognized.
    - The Speed Reduction Alternative can be blended with other alternatives.
- The Single Lane Alternative from I-25 to Yale degrades to unacceptable levels for vehicle Level of Service (delays) and Queuing.
    - The Single Lane Alternative provides the most significant impact and opportunity to benefit Bicycle and Pedestrian Levels of Traffic Stress.
- The Two-way Operation alternative is the most expensive and complex to implement. Considerable improvements would be required at the I-25 interchanges and the Washington Street junction.

- The Noise Assessment concluded that commercial and heavy vehicles are not significant contributors to the noise level. Restriction on heavy vehicles would likely not provide noticeable benefits.
- Opportunities exist to implement proven safety countermeasures beyond the alternatives presented in the RSA to improve safety for all users.

Table 28: Decision Matrix

	Existing	Speed Reduction	Single Lane Operation	Single Lane Sections	Two-Way Operation	Enhanced Safety Options
LOS	↑	↑↑	↓↓	↓	↕	↑↑
Queue	↑↑	↑	↓↓	↓	↕	↑
BLTS	↓	↑	↑↑	↑↑	↕	↑
PLTS	↓↓	↓↓	↓	↓	↓	↓
Cost	↑↑	↑↑	↕	↑	↓↓	↕
Safety	↓	↕	↑	↑	↕	↑↑

Legend	High Rated	Mid-High Rated	Mid Rated	Low-Mid Rated	Low Rated
	↑↑	↑	↕	↓	↓↓

Appendix A: Scoping Documents

ARIZONA
TEXAS
NEW MEXICO
OKLAHOMA

January 17, 2024

Tim Brown, PE, PTOE
City of Albuquerque
Traffic Engineering Division

Re: Lead and Coal Studies, V3

Mr. Brown:

Lee Engineering (LEE) is pleased to offer this proposal to complete evaluations for the Lead and Coal Avenue corridors. The scope of services presented in this proposal is based on our understanding of the needs of this project(s).

PROJECT UNDERSTANDING

It is our understanding that the City of Albuquerque is working with Lead and Coal Avenue stakeholders to evaluate safety alternatives for the corridors.

Tasks in the Basic Services contain project management and pieces of the project that pertain to multiple Initiatives. These include further corridor comparison crash analysis, project coordination meetings, and project documentation.

Additional study initiatives include:

- Speed limit reduction and other treatments,
- Reducing the number of lanes,
- Converting Lead and Coal Avenues to two-way streets, and
- Completing a noise assessment.

SCOPE

BASIC SERVICES

Crash Comparison and Trend Analysis

To further explore the Lead and Coal Avenues crash data and trends, additional studies will be completed to evaluate other comparative arterials throughout Albuquerque. The focus of this endeavor will be to compare crash rates based on volumes and roadway streetscape conditions. Included in the analysis will be comparisons across the CABQ Modified High Fatality Injury Network.

An additional evaluation will be completed to research the relationship between crash rates and increasing traffic volumes.

Public Meetings

Lee Engineering will conduct three public meetings. The meetings will generally be formatted to complete an initial introduction and information gathering meeting, then a presentation of preliminary findings meeting, followed by a presentation of the final recommendations meeting.

Lead and Coal Working Group Support

Lee will attend the ongoing monthly working group meetings. Lee Engineering will inform the group of the study's progress. Lee will gather comments and questions regarding the update and research to give feedback to the group.

Project Documentation

Lee will document the selected study options within a Project Report. Study procedures, data, and findings will be documented.

INITIATIVE 1. POSTED SPEED REDUCTION AND OTHER SPEED TREATMENTS

Lee Engineering will complete a feasibility and impact analysis of reducing the posted speed and other speed treatments.

To evaluate the reduction of the posted speed limit to 25 mph, Lee Engineering will complete a level of service and capacity analysis for the corridor. Base traffic volumes will be established through 27 turning movement counts at all the signalized intersections on Lead and Coal Avenues from Broadway Boulevard to Washington Street. Intersection performance metrics will be reported using Synchro for the existing 30 mph speed limit and a 25 mph speed limit scenario.

Lee Engineering will complete a best practices and literary search regarding posted speed limit reductions and agency experience. The focus of the research will be on before and after speed compliance and crash effects.

Along with the speed limit reduction options, Lee Engineering will explore alternative speed reduction treatments, including but not limited to gateway treatments, wide striping, narrowing lanes, landscaping, and strategic retro-reflectivity.

Additionally, Lee Engineering will investigate reports of drivers turning from the wrong lane and explore potential mitigation treatments. Lee Engineering will project crash impacts based on any available crash modification factors and engineering judgment.

Recommendations will be accompanied by a preliminary implementation plan and cost estimates for the implementation.

INITIATIVE 2. REDUCTION TO SINGLE-LANE

Lee Engineering will evaluate the feasibility of reducing the number of lanes on Lead and Coal Avenues to 1 in each direction.

Lee Engineering will collect turning movement counts for Lead and Coal Avenues as well as Lomas Boulevard, Central Avenue, Garfield Avenue, and Gibson Boulevard.

Lee will complete a field visit to confirm the existing intersection and lane geometry and signal phasing.

Traffic diversion will be estimated by balancing travel times and delays amongst the corridors.

Measures of effectiveness (MOE) will be estimated using Synchro traffic software. The reported MOEs will include vehicle delays and level of service. Included in the analysis will be a left-turn operations analysis.

No analysis will be completed for future scenarios as the project area is near full buildout.

Lee Engineering will project crash impacts based on any available crash modification factors and engineering judgment.

Recommendations will be accompanied by a preliminary implementation plan and cost estimates for the implementation.

INITIATIVE 3. CONVERT TO TWO-WAY OPERATIONS

Lee Engineering will evaluate the feasibility of changing the corridor to two-way operations on both Lead and Coal Avenues. The analysis will also estimate the traffic diversion and impacts on other corridors. Lee will complete a field visit to confirm the existing intersection and lane geometry and signal phasing.

Lee Engineering will collect turning movement counts for Lead and Coal Avenues as well as Lomas Boulevard, Central Avenue, Garfield Avenue, and Gibson Boulevard. Traffic diversion will be estimated by balancing travel times and delays amongst the corridors. Measures of effectiveness reported will include vehicle delays and level of service. Traffic diversion will be estimated by balancing travel times and delays amongst the corridors.

Measures of effectiveness (MOE) will be estimated using Synchro traffic software. The reported MOEs will include vehicle delays and level of service. Included in the analysis will be a left-turn operations analysis. No analysis will be completed for future scenarios as the project area is near full buildout.

Lee Engineering will project crash impacts based on any available crash modification factors and engineering judgment. Recommendations will be accompanied by a preliminary implementation plan and cost estimates for the implementation.

INITIATIVE 4. NOISE ASSESSMENT

Lee Engineering will complete up to ten noise level measurements throughout the corridor. Each of these measurements will be compared to the FHWA Guidance for roadway sound levels and mitigations.

Lee Engineering will document the impacts of persistent noise levels versus nuisance noise levels. Lee Engineering will document standard noise mitigation techniques and discuss the pros and cons of each.

Lee Engineering's 2023 roadway volumes, speed, and classification counts will be documented. Specifically, the truck volumes will be extracted for use and discussion.

Lee Engineering will research and document the City's noise level ordinances and options for enforcement. Lee Engineering will research and document options for truck restrictions. Cost estimates will be prepared for applicable mitigation options.

If you have any questions, please contact me at (505) 338-0988. Thank you for the opportunity to conduct this Study on your behalf, and I look forward to working with you on this Project.

Sincerely,

_____

Paul Barricklow, PE, PTOE
Principal

Counts on Lead and Coal Avenues	Counts on Central Avenue (12)
Broadway Boulevard	Spruce Street
Walter Street	University Boulevard
Locus Street	Yale Boulevard
Oak Street	Cornell Drive
Cedar Street (Lead)	Stanford Drive
Spruce Street (Coal)	Princeton Drive
University Boulevard	Girard Boulevard
Buena Vista Drive	Richmond Drive
Yale Boulevard	Wellesley Drive
Columbia Drive (Lead)	Carlisle Boulevard
Stanford Drive (Coal)	Morningside Drive
Girard Boulevard	Washington Street
Wellesley Drive (Lead)	
Bryn Mawr Drive (Coal)	Counts on Gibson Boulevard (7)
Carlisle Boulevard	University Boulevard
Morningside Drive	Yale Boulevard
Washington Street	Girard Boulevard
	Carlisle Boulevard
Counts on Lomas (6)	Maxwell Street
University Boulevard	Truman Street
Yale Boulevard	
Stanford Drive	Counts on Garfield Avenue (4)
Girard Boulevard	Yale Boulevard
Carlisle Boulevard	Girard Boulevard
Washington Street	Carlisle Boulevard
	Morningside Drive

Appendix B: Network Peak Hours

Intersection	AM Peak Hour	MD Peak Hour	PM Peak Hour
Lomas Blvd & Carlisle Blvd	7:30 AM	12:00 PM	4:30 PM
Lomas Blvd & Washington St	7:30 AM	12:15 PM	4:30 PM
Lomas Blvd & Girard Blvd	7:30 AM	12:00 PM	4:30 PM
Lomas Blvd & Yale Blvd	7:30 AM	12:00 PM	4:30 PM
Lomas Blvd & Standford Dr	7:30 AM	12:00 PM	4:30 PM
Lomas Blvd & University Blvd	7:30 AM	12:00 PM	3:45 PM
Central Ave & Washington St	8:00 AM	11:15 AM	4:45 PM
Central Ave & Morningside Dr	8:00 AM	11:15 AM	4:45 PM
Central Ave & Carlisle Blvd	8:00 AM	11:15 AM	4:45 PM
Central Ave & Wellesley	8:00 AM	11:30 AM	5:00 PM
Central Ave & Princeton Dr	8:00 AM	11:30 AM	5:00 PM
Central Ave & Standford Dr	8:00 AM	11:30 AM	5:00 PM
Central Ave & Cornell Dr	7:45 AM	11:30 AM	5:15 PM
Central Ave & Yale Blvd	7:45 AM	12:00 PM	5:00 PM
Central Ave & University Blvd	7:45 AM	11:30 AM	4:30 PM
Central Ave & Spruce St	7:30 AM	12:15 PM	4:30 PM
Central Ave & Girard Blvd	8:00 AM	11:30 AM	5:00 PM
Central Ave & Richmond Dr	8:00 AM	1:00 PM	4:00 PM
Lead Ave & Morningside Dr	7:45 AM	12:30 PM	4:30 PM
Lead Ave & Carlisle Blvd	7:45 AM	11:45 PM	4:15 PM
Lead Ave & Girard Blvd	7:45 AM	11:45 PM	4:45 PM
Lead Ave & Wellesley Dr	7:30 AM	12:00 PM	5:00 PM
Lead Ave & Columbia Dr	7:30 AM	12:00 PM	5:00 PM
Lead Ave & Yale Blvd	8:00 AM	12:30 PM	4:45 PM
Lead Ave & Buena Vista Dr	7:30 AM	12:15 PM	4:45 PM
Lead Ave & University Blvd	7:30 AM	12:15 PM	4:30 PM
Lead Ave & Cedar St	7:30 AM	12:15 PM	4:15 PM
Lead Ave & Oak St	7:30 AM	12:00 PM	4:15 PM
Lead Ave & Locust St	7:45 AM	12:00 PM	4:45 PM
Lead Ave & Walter St	7:45 AM	12:30 PM	4:15 PM
Lead Ave & Broadway Blvd	7:45 AM	1:00 PM	4:15 PM
Coal Ave & Bryn Mawr Dr	7:15 AM	12:00 PM	4:30 PM
Coal Ave & Standford Dr	7:15 AM	12:00 PM	4:45 PM
Coal Ave & Buena Vista Dr	7:15 AM	11:15 PM	4:45 PM
Coal Ave & University Blvd	7:15 AM	11:15 AM	4:30 PM
Coal Ave & Spruce St	7:00 AM	12:30 PM	5:00 PM
Coal Ave & Oak St	7:15 AM	12:30 PM	4:30 PM
Coal Ave & Locust St	7:15 AM	12:30 PM	4:30 PM
Coal Ave & Broadway Blvd	7:30 AM	11:00 AM	4:15 PM
Coal Ave & Girard Blvd	8:00 AM	11:45 PM	4:45 PM
Coal Ave & Yale Blvd	8:00 AM	12:00 PM	4:30 PM
Coal Ave & Walter St	7:30 AM	12:00 PM	4:30 PM
Coal Ave & Carlisle Blvd	7:30 AM	12:00 PM	4:15 PM
Coal Ave & Morningside Dr	7:15 AM	12:00 PM	4:30 PM
Washington St & Zuni Rd	7:45 AM	12:00 PM	4:30 PM
Garfield Ave & Yale Blvd	7:30 AM	12:00 PM	4:30 PM
Garfield Ave & Girard Blvd	7:30 AM	12:00 PM	4:30 PM
Garfield Ave & Carlisle Blvd	7:30 AM	12:00 PM	4:30 PM
Garfield Ave & Morningside Dr	7:30 AM	12:00 PM	4:30 PM
Gibson Blvd & Truman St	7:15 AM	11:45 AM	3:30 PM
Gibson Blvd & Carlisle Blvd	7:15 AM	12:00 PM	3:30 PM
Gibson Blvd & Maxwell St	7:15 AM	12:00 PM	3:30 PM
Gibson Blvd & Girard Blvd	7:15 AM	12:00 PM	3:30 PM
Gibson Blvd & Yale Blvd	7:30 AM	11:45 AM	3:30 PM
Gibson Blvd & University Blvd	7:30 AM	12:00 PM	3:30 PM
Network Peak Hours:	**7:30 AM**	**12:00 PM**	**4:30 PM**

Appendix C: Turning Movement Counts

All Traffic Data Services

1 TRUMAN ST & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
08:00 AM - 08:15 AM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					TRUMAN ST					TRUMAN ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	149	101	0	0	38	107	0	0	0	9	0	3	0	0	1	7	0	0	415	2,174
6:15 AM	0	1	222	120	0	0	53	111	0	0	0	1	2	1	0	0	1	5	3	0	520	2,357
6:30 AM	0	0	239	108	0	0	41	184	1	0	0	2	0	2	0	0	2	16	0	0	595	2,573
6:45 AM	0	2	304	104	0	0	44	158	2	0	0	7	0	3	0	0	2	15	3	0	644	2,686
7:00 AM	0	1	280	97	0	0	53	127	2	0	0	10	0	5	0	0	2	19	2	0	598	2,819
7:15 AM	0	1	292	93	0	0	77	205	1	0	0	13	0	12	0	0	2	37	3	0	736	3,027
7:30 AM	0	1	281	72	0	0	57	242	2	0	0	13	2	11	0	0	1	23	3	0	708	2,984
7:45 AM	1	3	330	70	0	1	40	279	1	0	0	15	0	10	0	0	1	20	6	0	777	2,879
8:00 AM	0	6	348	73	0	0	69	247	3	0	0	26	0	7	0	0	1	22	4	0	806	2,705
8:15 AM	0	0	309	56	0	0	64	206	2	0	0	22	0	18	0	0	1	14	1	0	693	0
8:30 AM	0	3	252	51	0	0	64	177	2	0	0	18	0	16	0	0	1	13	6	0	603	0
8:45 AM	0	3	280	51	0	1	64	157	1	0	0	15	1	14	0	0	3	11	2	0	603	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	2	0	0	0	5	0	1	0	0	0	0	0	0	10
Lights	1	11	1,225	305	0	1	241	948	7	0	0	59	2	39	0	0	5	102	15	0	2,961
Mediums	0	0	24	3	0	0	2	23	0	0	0	3	0	0	0	0	0	0	1	0	56
Total	1	11	1,251	308	0	1	243	973	7	0	0	67	2	40	0	0	5	102	16	0	3,027
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
Bicycles on Crosswalk			0					1					0					2			3
Heavy Vehicle Percentage			0.1%					0.2%					5.5%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	7.5%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.92					0.95					0.86					0.73			0.94
Peak Hour Factor (PHF)	0.25	0.50	0.91	0.90	0.00	0.25	0.95	0.87	0.67	0.00	0.00	0.78	0.25	0.76	0.00	0.00	1.00	0.69	0.71	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	6
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	7
Lights																					
6:00 AM	0	0	145	101	0	0	37	105	0	0	0	8	0	3	0	0	1	7	0	0	407
6:15 AM	0	1	218	118	0	0	53	110	0	0	0	1	2	1	0	0	1	5	3	0	513
6:30 AM	0	0	238	105	0	0	41	181	1	0	0	1	0	2	0	0	2	15	0	0	586
6:45 AM	0	2	301	104	0	0	44	154	2	0	0	7	0	3	0	0	2	15	2	0	636
7:00 AM	0	1	279	97	0	0	53	124	2	0	0	9	0	5	0	0	2	19	2	0	593
7:15 AM	0	1	289	92	0	0	76	198	1	0	0	12	0	11	0	0	2	37	2	0	721
7:30 AM	0	1	275	72	0	0	57	234	2	0	0	12	2	11	0	0	1	23	3	0	693
7:45 AM	1	3	327	68	0	1	40	275	1	0	0	13	0	10	0	0	1	20	6	0	766
8:00 AM	0	6	334	73	0	0	68	241	3	0	0	22	0	7	0	0	1	22	4	0	781
8:15 AM	0	0	302	54	0	0	63	201	1	0	0	14	0	18	0	0	1	14	1	0	669
8:30 AM	0	3	242	50	0	0	64	175	2	0	0	14	0	15	0	0	1	13	5	0	584
8:45 AM	0	3	266	49	0	1	63	151	1	0	0	10	1	12	0	0	3	11	2	0	573
Mediums																					
6:00 AM	0	0	4	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	8
6:15 AM	0	0	4	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
6:30 AM	0	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	8
6:45 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	8
7:00 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	3	1	0	0	1	6	0	0	0	0	0	0	0	0	0	0	1	0	12
7:30 AM	0	0	5	0	0	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	14
7:45 AM	0	0	3	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
8:00 AM	0	0	13	0	0	0	1	6	0	0	0	2	0	0	0	0	0	0	0	0	22
8:15 AM	0	0	7	2	0	0	1	4	1	0	0	3	0	0	0	0	0	0	0	0	18
8:30 AM	0	0	9	1	0	0	0	2	0	0	0	2	0	1	0	0	0	0	1	0	16
8:45 AM	0	0	11	2	0	0	1	6	0	0	0	1	0	2	0	0	0	0	0	0	23
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	1	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	1	0	0	0	0	0	0	2	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	2	3
8:45 AM	1	0	1	0	0	0	1	0	1	1	0	1

All Traffic Data Services

1 TRUMAN ST & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
11:45 AM - 12:45 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					TRUMAN ST					TRUMAN ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	5	178	42	0	1	29	193	2	0	0	53	6	60	0	0	1	5	3	0	578	2,354
11:15 AM	2	5	177	41	0	1	40	191	4	0	0	48	8	48	0	0	1	10	4	0	580	2,427
11:30 AM	0	8	179	39	0	0	51	209	7	0	0	43	13	52	0	0	2	12	8	0	623	2,466
11:45 AM	0	8	154	42	0	0	36	193	3	0	0	58	14	44	0	0	4	8	9	0	573	2,468
12:00 PM	0	12	195	43	0	2	28	244	7	0	0	36	3	49	0	0	7	16	9	0	651	2,468
12:15 PM	0	7	187	49	0	2	44	215	1	0	0	44	7	40	0	0	7	7	9	0	619	2,351
12:30 PM	0	3	194	50	0	3	53	213	5	0	0	44	4	32	0	0	5	17	2	0	625	2,246
12:45 PM	0	3	200	60	0	0	27	202	5	0	0	34	3	19	0	0	2	9	9	0	573	2,193
1:00 PM	0	5	166	41	0	0	36	186	4	0	0	49	6	19	0	0	3	10	9	0	534	2,190
1:15 PM	0	5	166	37	0	0	26	185	3	0	0	50	5	27	0	0	2	4	4	0	514	0
1:30 PM	0	5	181	38	0	0	36	226	6	0	0	44	1	19	0	0	3	7	6	0	572	0
1:45 PM	0	2	187	44	0	1	17	216	5	0	0	51	4	31	0	0	3	2	7	0	570	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	4	0	0	0	8	0	2	0	0	0	0	0	0	15
Lights	0	29	716	182	0	7	159	838	14	0	0	167	28	161	0	0	22	48	26	0	2,397
Mediums	0	1	13	2	0	0	2	23	2	0	0	7	0	2	0	0	1	0	3	0	56
Total	0	30	730	184	0	7	161	865	16	0	0	182	28	165	0	0	23	48	29	0	2,468
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.1%					0.4%					2.7%					0.0%			0.6%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	4.4%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Peak Hour Factor (PHF)			0.95					0.94					0.94					0.78			0.95
Peak Hour Factor (PHF)	0.25	0.73	0.97	0.84	0.00	0.58	0.76	0.90	0.75	0.00	0.00	0.87	0.73	0.85	0.00	0.00	0.82	0.72	0.97	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	5
11:30 AM	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	1	0	0	0	0	1	0	0	0	4	0	2	0	0	0	0	0	0	8
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights																					
11:00 AM	0	5	174	42	0	1	29	187	2	0	0	49	6	60	0	0	1	5	3	0	564
11:15 AM	2	5	174	39	0	1	39	185	4	0	0	47	8	46	0	0	1	10	3	0	564
11:30 AM	0	8	177	38	0	0	51	203	7	0	0	39	13	51	0	0	2	12	8	0	609
11:45 AM	0	7	153	41	0	0	36	184	3	0	0	52	14	41	0	0	4	8	9	0	552
12:00 PM	0	12	192	43	0	2	28	238	6	0	0	33	3	48	0	0	7	16	8	0	636
12:15 PM	0	7	182	48	0	2	42	209	1	0	0	40	7	40	0	0	6	7	8	0	599
12:30 PM	0	3	189	50	0	3	53	207	4	0	0	42	4	32	0	0	5	17	1	0	610
12:45 PM	0	3	196	59	0	0	25	193	5	0	0	33	3	18	0	0	2	9	9	0	555
1:00 PM	0	5	160	40	0	0	36	183	4	0	0	46	6	19	0	0	3	10	9	0	521
1:15 PM	0	5	162	36	0	0	26	180	3	0	0	48	5	25	0	0	2	4	4	0	500
1:30 PM	0	5	176	37	0	0	35	220	6	0	0	43	1	19	0	0	3	7	6	0	558
1:45 PM	0	2	182	43	0	1	16	211	5	0	0	51	4	31	0	0	3	2	7	0	558
Mediums																					
11:00 AM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
11:15 AM	0	0	2	2	0	0	1	4	0	0	0	1	0	0	0	0	0	0	1	0	11
11:30 AM	0	0	2	1	0	0	0	3	0	0	0	3	0	1	0	0	0	0	0	0	10
11:45 AM	0	1	0	1	0	0	0	8	0	0	0	2	0	1	0	0	0	0	0	0	13
12:00 PM	0	0	3	0	0	0	0	5	1	0	0	1	0	1	0	0	0	0	1	0	12
12:15 PM	0	0	5	1	0	0	2	5	0	0	0	2	0	0	0	0	1	0	1	0	17
12:30 PM	0	0	5	0	0	0	0	5	1	0	0	2	0	0	0	0	0	0	1	0	14
12:45 PM	0	0	4	1	0	0	2	8	0	0	0	0	0	0	0	0	0	0	0	0	15
1:00 PM	0	0	6	1	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	12
1:15 PM	0	0	4	1	0	0	0	5	0	0	0	1	0	1	0	0	0	0	0	0	12
1:30 PM	0	0	4	1	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	12
1:45 PM	0	0	5	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	1	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	0	1	1	0	1	0	0	0	3	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	1	0	0	0	0	1	1	0	1	1
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	1	1	1	2	0	0	0
1:30 PM	0	1	1	0	0	0	1	0	1	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	1	2	3

All Traffic Data Services

1 TRUMAN ST & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 15-Minutes
03:30 PM - 03:45 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					TRUMAN ST					TRUMAN ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	3	3	281	17	0	1	6	406	6	0	0	142	12	62	0	0	2	1	11	0	953	3,660
3:45 PM	0	4	281	31	0	1	11	381	3	0	0	148	7	54	0	0	3	1	10	0	935	3,535
4:00 PM	0	7	280	17	0	0	8	399	3	0	0	127	14	44	0	0	3	1	9	0	912	3,454
4:15 PM	2	3	280	8	0	1	6	388	2	0	0	117	9	38	0	0	2	0	4	0	860	3,316
4:30 PM	0	10	226	11	0	0	2	372	3	0	0	135	11	47	0	0	1	1	9	0	828	3,215
4:45 PM	1	9	218	11	0	1	5	420	9	0	0	115	10	42	0	0	2	1	10	0	854	3,023
5:00 PM	1	5	189	6	0	1	5	399	4	0	0	98	7	50	0	0	1	1	7	0	774	2,788
5:15 PM	0	4	261	11	0	1	8	354	1	0	0	72	5	37	0	0	0	0	5	0	759	2,593
5:30 PM	0	3	199	7	0	0	10	268	1	0	0	93	9	42	0	0	0	0	4	0	636	2,286
5:45 PM	1	3	177	12	0	0	6	300	3	0	0	66	10	32	0	0	1	1	7	0	619	0
6:00 PM	0	3	184	16	0	0	5	261	3	0	0	61	0	30	0	0	4	6	6	0	579	0
6:15 PM	0	7	155	2	0	2	2	208	5	0	0	42	0	15	0	0	2	4	8	0	452	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	4
Lights	5	16	1,102	71	0	3	30	1,544	14	0	0	526	42	195	0	0	10	3	34	0	3,595
Mediums	0	1	20	1	0	0	1	29	0	0	0	6	0	3	0	0	0	0	0	0	61
Total	5	17	1,122	73	0	3	31	1,574	14	0	0	534	42	198	0	0	10	3	34	0	3,660
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.1%					0.1%					0.3%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.96					0.97					0.90					0.84			0.96
Peak Hour Factor (PHF)	0.42	0.73	1.00	0.59	0.00	0.75	0.70	0.94	0.50	0.00	0.00	0.90	0.79	0.80	0.00	0.00	0.83	0.46	0.77	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	3	3	275	17	0	1	6	397	6	0	0	140	12	61	0	0	2	1	11	0	935
3:45 PM	0	4	277	29	0	1	10	372	3	0	0	146	7	54	0	0	3	1	10	0	917
4:00 PM	0	6	273	17	0	0	8	393	3	0	0	124	14	44	0	0	3	1	9	0	895
4:15 PM	2	3	277	8	0	1	6	382	2	0	0	116	9	36	0	0	2	0	4	0	848
4:30 PM	0	10	221	11	0	0	2	364	3	0	0	134	11	47	0	0	1	1	9	0	814
4:45 PM	1	9	217	11	0	1	5	415	9	0	0	111	10	42	0	0	2	1	10	0	844
5:00 PM	1	5	189	6	0	1	5	397	4	0	0	98	7	50	0	0	1	1	7	0	772
5:15 PM	0	4	259	10	0	1	8	352	1	0	0	70	5	37	0	0	0	0	5	0	752
5:30 PM	0	3	194	7	0	0	10	268	1	0	0	93	9	41	0	0	0	0	4	0	630
5:45 PM	1	3	177	12	0	0	6	298	3	0	0	65	10	31	0	0	1	1	7	0	615
6:00 PM	0	3	183	16	0	0	5	255	3	0	0	61	0	30	0	0	4	6	6	0	572
6:15 PM	0	7	152	2	0	2	2	204	5	0	0	42	0	15	0	0	2	4	7	0	444
Mediums																					
3:30 PM	0	0	6	0	0	0	0	9	0	0	0	1	0	1	0	0	0	0	0	0	17
3:45 PM	0	0	4	1	0	0	1	8	0	0	0	1	0	0	0	0	0	0	0	0	15
4:00 PM	0	1	7	0	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	17
4:15 PM	0	0	3	0	0	0	0	6	0	0	0	1	0	2	0	0	0	0	0	0	12
4:30 PM	0	0	4	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11
4:45 PM	0	0	1	0	0	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	10
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	2	1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	7
5:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	4
6:00 PM	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7
6:15 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	8
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	1	2	1	3	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	1	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	1	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	1	0	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

2 CARLISLE BLVD & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
08:00 AM - 08:15 AM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	1	8	272	98	0	1	6	122	0	0	0	0	0	0	0	0	6	7	11	0	532	2,640
6:15 AM	1	6	320	122	0	0	7	105	2	0	0	2	0	2	0	0	10	9	13	0	599	2,859
6:30 AM	0	12	357	141	0	0	10	162	4	0	0	2	0	1	0	0	3	11	20	0	723	3,074
6:45 AM	0	9	395	144	0	0	12	170	4	0	0	5	0	1	0	0	8	21	17	0	786	3,169
7:00 AM	1	18	381	144	0	0	12	138	4	0	0	3	0	1	0	0	10	19	20	0	751	3,297
7:15 AM	1	15	355	155	0	0	23	185	6	0	0	1	1	0	0	0	17	29	26	0	814	3,525
7:30 AM	1	18	337	112	0	1	13	248	7	0	0	2	0	1	0	0	13	33	32	0	818	3,455
7:45 AM	0	15	390	106	0	0	18	288	6	0	4	2	2	2	0	2	17	24	38	0	914	3,338
8:00 AM	21	33	419	118	0	1	20	270	14	0	0	3	0	1	0	0	13	25	41	0	979	3,043
8:15 AM	4	24	327	105	0	1	21	191	9	0	0	3	0	1	0	0	18	13	27	0	744	0
8:30 AM	0	26	292	91	0	0	7	212	16	0	0	3	1	0	0	0	19	12	22	0	701	0
8:45 AM	0	14	314	50	0	0	10	162	9	0	0	1	2	1	0	1	26	8	21	0	619	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
Lights	23	77	1,472	491	0	2	74	964	28	0	0	8	1	4	0	0	56	110	132	0	3,442
Mediums	0	4	27	0	0	0	0	21	5	0	4	0	2	0	0	2	4	1	5	0	75
Total	23	81	1,501	491	0	2	74	991	33	0	4	8	3	4	0	2	60	111	137	0	3,525
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.1%					0.5%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.97					0.89					0.55					0.96			0.90
Peak Hour Factor (PHF)	0.31	0.74	0.90	0.94	0.00	0.75	0.80	0.87	0.75	0.00	0.25	0.60	0.38	0.63	0.00	0.25	0.73	0.84	0.84	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
8:30 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
Lights																					
6:00 AM	1	8	265	98	0	1	6	119	0	0	0	0	0	0	0	0	6	7	11	0	522
6:15 AM	1	6	314	122	0	0	7	102	2	0	0	1	0	2	0	0	10	9	13	0	589
6:30 AM	0	12	354	141	0	0	10	159	3	0	0	2	0	1	0	0	3	11	19	0	715
6:45 AM	0	9	393	143	0	0	12	162	4	0	0	5	0	1	0	0	7	21	17	0	774
7:00 AM	1	18	378	143	0	0	12	134	4	0	0	3	0	1	0	0	10	19	20	0	743
7:15 AM	1	15	352	155	0	0	23	180	4	0	0	1	1	0	0	0	16	28	26	0	802
7:30 AM	1	18	331	112	0	1	13	242	7	0	0	2	0	1	0	0	13	33	31	0	805
7:45 AM	0	12	385	106	0	0	18	281	6	0	0	2	0	2	0	0	15	24	37	0	888
8:00 AM	21	32	404	118	0	1	20	261	11	0	0	3	0	1	0	0	12	25	38	0	947
8:15 AM	4	22	317	104	0	1	21	176	9	0	0	3	0	1	0	0	17	13	26	0	714
8:30 AM	0	25	280	91	0	0	7	206	16	0	0	3	1	0	0	0	18	12	22	0	681
8:45 AM	0	13	296	50	0	0	10	154	8	0	0	1	2	1	0	1	23	8	18	0	585
Mediums																					
6:00 AM	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
6:15 AM	0	0	6	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	10
6:30 AM	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	7
6:45 AM	0	0	2	1	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	12
7:00 AM	0	0	3	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	0	0	3	0	0	0	0	3	2	0	0	0	0	0	0	0	1	1	0	0	10
7:30 AM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	12
7:45 AM	0	3	5	0	0	0	0	4	0	0	4	0	2	0	0	2	2	0	1	0	23
8:00 AM	0	1	14	0	0	0	0	8	3	0	0	0	0	0	0	0	1	0	3	0	30
8:15 AM	0	2	10	1	0	0	0	8	0	0	0	0	0	0	0	0	1	0	1	0	23
8:30 AM	0	1	10	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	15
8:45 AM	0	1	16	0	0	0	0	4	1	0	0	0	0	0	0	0	3	0	3	0	28
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	2	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	1	1	0	1	1	0	2	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	3

All Traffic Data Services

2 CARLISLE BLVD & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 15-Minutes
03:30 PM - 03:45 PM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					CARLISLE BLVD Northbound					CARLISLE BLVD Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	7	22	285	6	0	0	0	505	21	0	0	134	33	21	0	0	18	0	28	0	1,080	4,204
3:45 PM	5	38	321	1	0	0	1	523	26	0	0	83	26	18	0	0	10	0	27	0	1,079	4,047
4:00 PM	2	31	269	1	0	0	1	486	18	0	0	134	28	23	0	0	20	0	27	0	1,040	3,901
4:15 PM	1	43	287	1	0	0	1	499	21	0	0	90	19	13	0	0	9	0	21	0	1,005	3,753
4:30 PM	1	25	241	0	0	0	0	476	21	0	0	86	19	19	0	0	16	0	19	0	923	3,561
4:45 PM	1	30	210	0	0	0	0	522	23	0	0	83	19	9	0	0	17	0	19	0	933	3,304
5:00 PM	1	36	210	0	0	2	0	501	23	0	0	41	15	13	0	0	19	0	31	0	892	2,998
5:15 PM	1	29	258	0	0	2	0	408	27	0	0	32	9	5	0	0	13	0	29	0	813	2,683
5:30 PM	0	25	216	0	0	1	0	364	14	0	0	4	0	0	0	0	10	0	32	0	666	2,352
5:45 PM	2	12	205	0	0	2	1	356	14	0	0	0	1	0	0	0	15	0	19	0	627	0
6:00 PM	0	23	199	0	0	0	0	298	18	0	0	1	0	0	0	0	9	0	29	0	577	0
6:15 PM	0	18	152	0	0	1	0	271	9	0	0	0	0	0	0	0	11	0	20	0	482	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	15	132	1,141	9	0	0	3	1,970	83	0	0	439	106	75	0	0	51	0	101	0	4,125
Mediums	0	2	20	0	0	0	0	40	3	0	0	2	0	0	0	0	6	0	2	0	75
Total	15	134	1,162	9	0	0	3	2,013	86	0	0	441	106	75	0	0	57	0	103	0	4,204
Bicycles on Road	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.1%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.90					0.96					0.83					0.85			0.97
Peak Hour Factor (PHF)	0.54	0.80	0.90	0.38	0.00	0.88	0.75	0.96	0.87	0.00	0.00	0.82	0.80	0.82	0.00	0.00	0.86	0.00	0.87	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	7	22	279	6	0	0	0	490	21	0	0	134	33	21	0	0	16	0	27	0	1056
3:45 PM	5	37	315	1	0	0	1	514	26	0	0	81	26	18	0	0	10	0	26	0	1060
4:00 PM	2	31	262	1	0	0	1	475	16	0	0	134	28	23	0	0	17	0	27	0	1017
4:15 PM	1	42	285	1	0	0	1	491	20	0	0	90	19	13	0	0	8	0	21	0	992
4:30 PM	1	24	234	0	0	0	0	470	20	0	0	86	19	19	0	0	15	0	18	0	906
4:45 PM	1	29	209	0	0	0	0	515	23	0	0	83	19	9	0	0	17	0	18	0	923
5:00 PM	1	36	207	0	0	2	0	497	20	0	0	41	15	13	0	0	19	0	31	0	882
5:15 PM	1	29	256	0	0	2	0	404	27	0	0	32	9	5	0	0	12	0	29	0	806
5:30 PM	0	24	208	0	0	1	0	363	14	0	0	4	0	0	0	0	10	0	32	0	656
5:45 PM	2	12	205	0	0	2	1	354	13	0	0	0	1	0	0	0	15	0	19	0	624
6:00 PM	0	23	199	0	0	0	0	294	18	0	0	1	0	0	0	0	8	0	29	0	572
6:15 PM	0	18	149	0	0	1	0	265	9	0	0	0	0	0	0	0	10	0	20	0	472
Mediums																					
3:30 PM	0	0	6	0	0	0	0	14	0	0	0	0	0	0	0	0	2	0	1	0	23
3:45 PM	0	1	5	0	0	0	0	7	0	0	0	2	0	0	0	0	0	0	1	0	16
4:00 PM	0	0	7	0	0	0	0	11	2	0	0	0	0	0	0	0	3	0	0	0	23
4:15 PM	0	1	2	0	0	0	0	8	1	0	0	0	0	0	0	0	1	0	0	0	13
4:30 PM	0	0	6	0	0	0	0	4	1	0	0	0	0	0	0	0	1	0	1	0	13
4:45 PM	0	1	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	0	0	3	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	10
5:15 PM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	7
5:30 PM	0	0	8	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9
5:45 PM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	5
6:15 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	10
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	0	1	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	2	1	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	1

All Traffic Data Services

2 CARLISLE BLVD & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					CARLISLE BLVD Northbound					CARLISLE BLVD Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	19	201	3	0	0	0	224	13	0	0	1	0	2	0	1	14	0	16	0	494	2,053
11:15 AM	2	15	204	1	0	0	0	224	18	0	0	0	0	2	0	0	15	0	21	0	502	2,149
11:30 AM	3	22	215	1	0	0	0	231	15	0	0	0	0	0	0	1	10	0	18	0	516	2,238
11:45 AM	1	28	215	2	0	0	1	242	15	0	0	1	0	2	0	0	13	0	21	0	541	2,261
12:00 PM	2	21	231	1	0	1	2	270	14	0	0	0	0	2	0	0	17	0	29	0	590	2,290
12:15 PM	3	21	248	0	0	0	0	256	18	0	0	0	0	1	0	0	17	0	27	0	591	2,219
12:30 PM	3	17	222	1	0	0	1	248	15	0	0	0	0	0	0	0	17	0	15	0	539	2,121
12:45 PM	1	27	245	0	0	0	0	242	11	0	0	0	0	0	0	0	11	0	33	0	570	2,136
1:00 PM	3	18	207	0	0	0	0	234	14	0	0	0	0	0	0	0	19	0	24	0	519	2,125
1:15 PM	7	12	191	0	0	0	0	223	14	0	0	0	0	1	0	0	15	1	29	0	493	0
1:30 PM	0	20	223	0	0	2	2	261	11	0	0	1	0	0	0	0	14	0	20	0	554	0
1:45 PM	1	19	223	1	0	0	0	263	10	0	0	0	0	1	0	0	17	0	24	0	559	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Lights	9	84	926	2	0	1	3	971	54	0	0	0	0	3	0	0	57	0	103	0	2,213
Mediums	0	2	20	0	0	0	0	35	4	0	0	0	0	0	0	0	5	0	1	0	67
Total	9	86	946	2	0	1	3	1,016	58	0	0	0	0	3	0	0	62	0	104	0	2,290
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					1					1					0			2
Heavy Vehicle Percentage			0.0%					0.9%					0.0%					0.0%			0.4%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Peak Hour Factor (PHF)			0.96					0.94					0.67					0.90			0.97
Peak Hour Factor (PHF)	0.50	0.82	0.95	0.58	0.00	0.25	0.50	0.94	0.86	0.00	0.00	0.50	0.00	0.75	0.00	0.50	0.86	0.25	0.80	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	0	18	197	3	0	0	0	213	13	0	0	1	0	2	0	1	14	0	15	0	477
11:15 AM	2	14	198	1	0	0	0	217	16	0	0	0	0	2	0	0	15	0	21	0	486
11:30 AM	3	21	210	1	0	0	0	222	14	0	0	0	0	0	0	1	8	0	17	0	497
11:45 AM	1	27	212	2	0	0	1	229	14	0	0	1	0	2	0	0	13	0	20	0	522
12:00 PM	2	21	226	1	0	1	2	259	13	0	0	0	0	2	0	0	15	0	29	0	571
12:15 PM	3	21	242	0	0	0	0	247	16	0	0	0	0	1	0	0	15	0	26	0	571
12:30 PM	3	15	217	1	0	0	1	237	15	0	0	0	0	0	0	0	16	0	15	0	520
12:45 PM	1	27	241	0	0	0	0	228	10	0	0	0	0	0	0	0	11	0	33	0	551
1:00 PM	3	15	198	0	0	0	0	229	12	0	0	0	0	0	0	0	17	0	23	0	497
1:15 PM	7	12	187	0	0	0	0	216	14	0	0	0	0	1	0	0	14	1	28	0	480
1:30 PM	0	19	217	0	0	2	2	255	10	0	0	1	0	0	0	0	13	0	19	0	538
1:45 PM	1	19	215	1	0	0	0	255	9	0	0	0	0	1	0	0	16	0	22	0	539
Mediums																					
11:00 AM	0	1	4	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	14
11:15 AM	0	1	5	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	12
11:30 AM	0	1	5	0	0	0	0	5	1	0	0	0	0	0	0	0	2	0	1	0	15
11:45 AM	0	1	2	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0	1	0	14
12:00 PM	0	0	5	0	0	0	0	7	1	0	0	0	0	0	0	0	2	0	0	0	15
12:15 PM	0	0	6	0	0	0	0	6	2	0	0	0	0	0	0	0	2	0	1	0	17
12:30 PM	0	2	5	0	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	18
12:45 PM	0	0	4	0	0	0	0	12	1	0	0	0	0	0	0	0	0	0	0	0	17
1:00 PM	0	3	9	0	0	0	0	5	2	0	0	0	0	0	0	0	2	0	1	0	22
1:15 PM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	1	0	11
1:30 PM	0	1	5	0	0	0	0	5	1	0	0	0	0	0	0	0	1	0	1	0	14
1:45 PM	0	0	8	0	0	0	0	7	1	0	0	0	0	0	0	0	1	0	2	0	19
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	1	0	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	2	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	1	2	3
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

3 MAXWELL ST & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
08:00 AM - 08:15 AM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					MAXWELL ST Northbound					MAXWELL ST Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	4	264	0	0	0	0	118	0	0	0	0	0	0	0	0	2	0	1	0	389	1,973
6:15 AM	0	3	310	0	0	1	0	108	5	0	0	0	0	0	0	0	8	0	1	0	436	2,159
6:30 AM	1	4	365	0	0	0	0	164	4	0	0	0	0	0	0	0	6	0	4	0	548	2,357
6:45 AM	0	6	385	0	0	0	0	186	6	0	0	0	0	0	0	0	12	0	5	0	600	2,449
7:00 AM	0	9	382	0	0	0	0	146	7	0	0	0	0	0	0	0	21	0	10	0	575	2,595
7:15 AM	0	11	372	0	0	0	0	195	15	0	0	0	0	0	0	0	28	0	13	0	634	2,786
7:30 AM	0	10	329	0	0	0	0	262	18	0	0	0	0	0	0	0	13	0	8	0	640	2,774
7:45 AM	0	8	397	0	0	0	0	299	9	0	0	0	0	0	0	0	18	0	15	0	746	2,716
8:00 AM	0	3	422	0	0	0	0	300	14	0	0	0	0	0	0	0	13	0	14	0	766	2,495
8:15 AM	0	6	372	0	0	0	0	216	7	0	0	0	0	0	0	0	14	0	7	0	622	0
8:30 AM	0	3	318	0	0	0	0	232	7	0	0	0	0	0	0	0	12	0	10	0	582	0
8:45 AM	1	12	318	0	0	0	0	174	6	0	0	0	0	0	0	0	8	0	6	0	525	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	9
Lights	0	32	1,491	0	0	0	0	1,024	55	0	0	0	0	0	0	0	72	0	49	0	2,723
Mediums	0	0	27	0	0	0	0	25	1	0	0	0	0	0	0	0	0	0	1	0	54
Total	0	32	1,520	0	0	0	0	1,056	56	0	0	0	0	0	0	0	72	0	50	0	2,786
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					2			2
Heavy Vehicle Percentage			0.1%					0.6%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.91					0.90					0.00					0.77			0.91
Peak Hour Factor (PHF)	0.25	0.86	0.90	0.00	0.00	0.25	0.00	0.90	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.83	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
8:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
Lights																					
6:00 AM	0	4	257	0	0	0	0	114	0	0	0	0	0	0	0	0	2	0	1	0	378
6:15 AM	0	3	305	0	0	1	0	105	5	0	0	0	0	0	0	0	8	0	1	0	428
6:30 AM	1	4	361	0	0	0	0	160	4	0	0	0	0	0	0	0	6	0	4	0	540
6:45 AM	0	6	382	0	0	0	0	178	6	0	0	0	0	0	0	0	12	0	5	0	589
7:00 AM	0	9	379	0	0	0	0	143	7	0	0	0	0	0	0	0	21	0	10	0	569
7:15 AM	0	11	368	0	0	0	0	187	15	0	0	0	0	0	0	0	28	0	13	0	622
7:30 AM	0	10	323	0	0	0	0	256	18	0	0	0	0	0	0	0	13	0	8	0	628
7:45 AM	0	8	391	0	0	0	0	293	9	0	0	0	0	0	0	0	18	0	15	0	734
8:00 AM	0	3	409	0	0	0	0	288	13	0	0	0	0	0	0	0	13	0	13	0	739
8:15 AM	0	6	358	0	0	0	0	202	7	0	0	0	0	0	0	0	14	0	7	0	594
8:30 AM	0	3	305	0	0	0	0	226	7	0	0	0	0	0	0	0	12	0	10	0	563
8:45 AM	1	11	298	0	0	0	0	164	5	0	0	0	0	0	0	0	8	0	6	0	493
Mediums																					
6:00 AM	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
6:15 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
6:30 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
6:45 AM	0	0	3	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	11
7:00 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:15 AM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
7:45 AM	0	0	6	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10
8:00 AM	0	0	12	0	0	0	0	10	1	0	0	0	0	0	0	0	0	0	1	0	24
8:15 AM	0	0	14	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	22
8:30 AM	0	0	12	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	15
8:45 AM	0	1	17	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	25
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

3 MAXWELL ST & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					MAXWELL ST Northbound					MAXWELL ST Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	1	218	0	0	0	0	244	13	0	0	0	0	0	0	0	8	0	2	0	486	1,933
11:15 AM	0	3	215	0	0	2	0	237	11	0	0	0	0	0	0	0	6	0	3	0	477	2,016
11:30 AM	0	5	224	0	0	0	0	247	5	0	0	0	0	0	0	0	9	0	4	0	494	2,098
11:45 AM	0	2	200	0	0	0	0	255	9	0	0	0	0	0	0	0	6	0	4	0	476	2,137
12:00 PM	1	5	257	0	0	0	0	287	8	0	0	0	0	0	0	0	6	0	5	0	569	2,181
12:15 PM	0	5	251	0	0	0	0	279	9	0	0	0	0	0	0	0	10	0	5	0	559	2,082
12:30 PM	0	2	248	0	0	0	0	262	7	0	0	0	0	0	0	0	8	0	6	0	533	1,995
12:45 PM	0	4	253	0	0	0	0	245	9	0	0	0	0	0	0	0	4	0	5	0	520	1,987
1:00 PM	0	5	210	0	0	1	0	239	4	0	0	0	0	0	0	0	5	0	6	0	470	1,992
1:15 PM	2	4	209	0	0	1	0	245	1	0	0	0	0	0	0	0	7	0	3	0	472	0
1:30 PM	1	1	239	0	0	0	0	268	9	0	0	0	0	0	0	0	4	0	3	0	525	0
1:45 PM	1	4	233	0	0	0	0	277	5	0	0	0	0	0	0	0	5	0	0	0	525	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Lights	1	15	985	0	0	0	0	1,026	31	0	0	0	0	0	0	0	28	0	19	0	2,105
Mediums	0	1	24	0	0	0	0	37	2	0	0	0	0	0	0	0	0	0	2	0	66
Total	1	16	1,009	0	0	0	0	1,073	33	0	0	0	0	0	0	0	28	0	21	0	2,181
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.9%					0.0%					0.0%			0.5%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Peak Hour Factor (PHF)			0.98					0.95					0.00					0.83			0.96
Peak Hour Factor (PHF)	0.50	0.85	0.98	0.00	0.00	0.25	0.00	0.94	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.92	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	0	1	214	0	0	0	0	232	13	0	0	0	0	0	0	0	8	0	2	0	470
11:15 AM	0	3	209	0	0	2	0	228	11	0	0	0	0	0	0	0	6	0	3	0	462
11:30 AM	0	5	219	0	0	0	0	236	5	0	0	0	0	0	0	0	9	0	4	0	478
11:45 AM	0	2	195	0	0	0	0	242	9	0	0	0	0	0	0	0	6	0	4	0	458
12:00 PM	1	4	251	0	0	0	0	275	8	0	0	0	0	0	0	0	6	0	5	0	550
12:15 PM	0	5	244	0	0	0	0	268	8	0	0	0	0	0	0	0	10	0	4	0	539
12:30 PM	0	2	243	0	0	0	0	252	7	0	0	0	0	0	0	0	8	0	5	0	517
12:45 PM	0	4	247	0	0	0	0	231	8	0	0	0	0	0	0	0	4	0	5	0	499
1:00 PM	0	5	202	0	0	1	0	231	4	0	0	0	0	0	0	0	5	0	5	0	453
1:15 PM	2	4	201	0	0	1	0	239	1	0	0	0	0	0	0	0	7	0	3	0	458
1:30 PM	1	1	232	0	0	0	0	262	9	0	0	0	0	0	0	0	4	0	3	0	512
1:45 PM	1	2	226	0	0	0	0	268	5	0	0	0	0	0	0	0	5	0	0	0	507
Mediums																					
11:00 AM	0	0	4	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	13
11:15 AM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
11:30 AM	0	0	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	12
11:45 AM	0	0	4	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	13
12:00 PM	0	1	6	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	15
12:15 PM	0	0	7	0	0	0	0	8	1	0	0	0	0	0	0	0	0	0	1	0	17
12:30 PM	0	0	5	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	15
12:45 PM	0	0	6	0	0	0	0	12	1	0	0	0	0	0	0	0	0	0	0	0	19
1:00 PM	0	0	8	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	16
1:15 PM	0	0	8	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	13
1:30 PM	0	0	6	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	11
1:45 PM	0	2	7	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	17
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	1	1	0	0	0	0	0	0	1	1	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	2	1	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

All Traffic Data Services

3 MAXWELL ST & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 15-Minutes
03:30 PM - 03:45 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					MAXWELL ST					MAXWELL ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	10	8	311	0	0	0	0	542	8	0	0	0	0	0	0	0	6	0	8	0	893	3,492
3:45 PM	1	4	329	0	0	0	0	535	12	0	0	0	0	0	0	0	8	0	4	0	893	3,385
4:00 PM	1	5	300	0	0	0	0	505	12	0	0	0	0	0	0	0	12	0	7	0	842	3,303
4:15 PM	1	8	308	0	0	0	0	507	23	0	0	0	0	0	0	0	11	0	6	0	864	3,238
4:30 PM	1	10	261	0	0	0	0	480	14	0	0	0	0	0	0	0	6	0	14	0	786	3,102
4:45 PM	0	7	243	0	0	0	0	520	26	0	0	0	0	0	0	0	7	0	8	0	811	2,933
5:00 PM	1	7	219	0	0	0	0	519	15	0	0	0	0	0	0	0	4	0	12	0	777	2,731
5:15 PM	2	5	269	0	0	0	0	422	11	0	0	0	0	0	0	0	10	0	9	0	728	2,494
5:30 PM	0	4	226	0	0	0	0	367	4	0	0	0	0	0	0	0	10	0	6	0	617	2,233
5:45 PM	1	4	212	0	0	0	0	363	12	0	0	0	0	0	0	0	9	0	8	0	609	0
6:00 PM	1	4	200	0	0	0	0	317	7	0	0	0	0	0	0	0	6	0	5	0	540	0
6:15 PM	0	2	172	0	0	0	0	278	7	0	0	0	0	0	0	0	4	0	4	0	467	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	13	23	1,223	0	0	0	0	2,044	53	0	0	0	0	0	0	0	36	0	24	0	3,416
Mediums	0	2	24	0	0	0	0	42	2	0	0	0	0	0	0	0	1	0	1	0	72
Total	13	25	1,248	0	0	0	0	2,089	55	0	0	0	0	0	0	0	37	0	25	0	3,492
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.1%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.96					0.97					0.00					0.89			0.98
Peak Hour Factor (PHF)	0.33	0.80	0.95	0.00	0.00	0.00	0.00	0.96	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.77	0.00	0.98

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	10	7	304	0	0	0	0	527	8	0	0	0	0	0	0	0	6	0	7	0	869
3:45 PM	1	4	325	0	0	0	0	525	12	0	0	0	0	0	0	0	8	0	4	0	879
4:00 PM	1	5	291	0	0	0	0	492	11	0	0	0	0	0	0	0	12	0	7	0	819
4:15 PM	1	7	303	0	0	0	0	500	22	0	0	0	0	0	0	0	10	0	6	0	849
4:30 PM	1	10	255	0	0	0	0	473	13	0	0	0	0	0	0	0	6	0	13	0	771
4:45 PM	0	7	240	0	0	0	0	514	26	0	0	0	0	0	0	0	7	0	8	0	802
5:00 PM	1	7	216	0	0	0	0	513	15	0	0	0	0	0	0	0	4	0	11	0	767
5:15 PM	2	5	266	0	0	0	0	418	11	0	0	0	0	0	0	0	10	0	9	0	721
5:30 PM	0	4	220	0	0	0	0	366	4	0	0	0	0	0	0	0	10	0	6	0	610
5:45 PM	1	4	211	0	0	0	0	360	12	0	0	0	0	0	0	0	9	0	8	0	605
6:00 PM	1	4	199	0	0	0	0	313	7	0	0	0	0	0	0	0	6	0	5	0	535
6:15 PM	0	2	168	0	0	0	0	272	7	0	0	0	0	0	0	0	4	0	4	0	457
Mediums																					
3:30 PM	0	1	7	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	1	0	23
3:45 PM	0	0	3	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	11
4:00 PM	0	0	9	0	0	0	0	13	1	0	0	0	0	0	0	0	0	0	0	0	23
4:15 PM	0	1	5	0	0	0	0	7	1	0	0	0	0	0	0	0	1	0	0	0	15
4:30 PM	0	0	5	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	1	0	12
4:45 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	10
5:15 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
5:30 PM	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
5:45 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
6:00 PM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	4	0	4
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	1

All Traffic Data Services

4 GIRARD BLVD & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
08:00 AM - 08:15 AM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	3	10	352	4	0	0	16	110	6	0	0	7	5	17	0	0	1	1	17	0	549	2,721
6:15 AM	0	15	431	2	0	0	13	116	7	0	0	2	5	23	0	0	5	2	17	0	638	2,920
6:30 AM	2	10	493	3	0	0	10	177	5	0	0	1	3	24	0	0	9	2	8	0	747	3,072
6:45 AM	0	4	514	5	0	0	13	178	10	0	0	1	3	34	0	0	11	4	10	0	787	3,174
7:00 AM	1	11	506	8	0	0	17	135	4	0	0	1	4	38	0	0	10	3	10	0	748	3,261
7:15 AM	0	19	479	10	0	0	13	192	14	0	0	2	2	45	0	0	2	1	11	0	790	3,478
7:30 AM	0	17	442	9	0	0	17	244	15	0	0	1	9	37	0	0	18	14	26	0	849	3,411
7:45 AM	0	19	455	6	0	0	28	264	13	0	0	1	10	44	0	0	12	6	16	0	874	3,248
8:00 AM	1	27	512	9	0	0	27	279	25	0	0	0	11	37	0	0	22	8	7	0	965	2,997
8:15 AM	1	16	398	5	0	0	13	206	17	0	0	1	5	29	0	0	13	7	12	0	723	0
8:30 AM	0	7	361	7	0	0	12	216	16	0	0	0	1	26	0	0	22	4	14	0	686	0
8:45 AM	0	12	364	5	0	0	15	166	11	0	0	1	3	17	0	0	14	7	8	0	623	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	13	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	19
Lights	1	79	1,843	33	0	0	85	949	65	0	0	4	32	162	0	0	54	29	55	0	3,391
Mediums	0	3	32	1	0	0	0	24	2	0	0	0	0	1	0	0	0	0	5	0	68
Total	1	82	1,888	34	0	0	85	979	67	0	0	4	32	163	0	0	54	29	60	0	3,478
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Bicycles on Crosswalk			0					1					0					1			2
Heavy Vehicle Percentage			0.6%					0.5%					0.0%					0.0%			0.5%
Heavy Vehicle Percentage	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Peak Hour Factor (PHF)			0.98					0.87					0.90					0.69			0.90
Peak Hour Factor (PHF)	0.42	0.76	0.97	0.85	0.00	0.00	0.76	0.89	0.71	0.00	0.00	0.39	0.80	0.91	0.00	0.00	0.81	0.63	0.61	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
8:45 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
Lights																					
6:00 AM	3	10	345	4	0	0	16	107	6	0	0	7	5	17	0	0	1	1	17	0	539
6:15 AM	0	15	425	2	0	0	13	112	7	0	0	2	5	22	0	0	4	2	17	0	626
6:30 AM	2	9	482	3	0	0	10	174	5	0	0	1	3	24	0	0	9	2	8	0	732
6:45 AM	0	4	508	4	0	0	13	170	10	0	0	1	3	34	0	0	11	4	10	0	772
7:00 AM	1	11	499	8	0	0	17	132	4	0	0	1	4	38	0	0	10	3	10	0	738
7:15 AM	0	18	471	9	0	0	13	187	13	0	0	2	2	44	0	0	2	1	9	0	771
7:30 AM	0	17	430	9	0	0	17	238	14	0	0	1	9	37	0	0	18	14	25	0	829
7:45 AM	0	17	444	6	0	0	28	256	13	0	0	1	10	44	0	0	12	6	14	0	851
8:00 AM	1	27	498	9	0	0	27	268	25	0	0	0	11	37	0	0	22	8	7	0	940
8:15 AM	1	16	388	5	0	0	13	191	17	0	0	1	4	29	0	0	13	7	12	0	697
8:30 AM	0	7	351	7	0	0	11	211	16	0	0	0	1	26	0	0	22	4	14	0	670
8:45 AM	0	11	345	4	0	0	15	155	11	0	0	1	3	17	0	0	13	7	8	0	590
Mediums																					
6:00 AM	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
6:15 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	1	0	0	1	0	0	0	10
6:30 AM	0	1	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8
6:45 AM	0	0	5	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	14
7:00 AM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
7:15 AM	0	1	7	1	0	0	0	3	1	0	0	0	0	1	0	0	0	0	2	0	16
7:30 AM	0	0	6	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	1	0	14
7:45 AM	0	2	9	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2	0	18
8:00 AM	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	20
8:15 AM	0	0	9	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	0	0	18
8:30 AM	0	0	7	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	10
8:45 AM	0	1	17	1	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	27
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	1	2	3
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	1	0	1	0	0	0	1	0	1	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	1	2	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1

All Traffic Data Services

4 GIRARD BLVD & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	1	15	214	2	0	0	13	220	15	0	0	2	6	13	0	0	9	2	16	0	528	2,152
11:15 AM	3	12	202	1	0	1	16	206	11	0	1	4	2	17	0	0	6	4	18	0	504	2,250
11:30 AM	1	22	226	4	0	0	28	217	7	0	0	5	2	10	0	0	11	11	11	0	555	2,378
11:45 AM	3	11	220	7	0	0	15	231	15	0	0	5	4	22	0	0	14	7	11	0	565	2,403
12:00 PM	1	20	238	6	0	0	19	253	22	0	0	3	5	17	0	0	13	6	23	0	626	2,454
12:15 PM	1	15	248	9	0	0	9	276	17	0	0	6	5	12	0	0	10	6	18	0	632	2,389
12:30 PM	3	16	222	8	0	0	13	237	13	0	0	3	6	11	0	0	21	6	21	0	580	2,276
12:45 PM	1	14	248	7	0	0	22	242	16	0	0	6	10	11	0	0	9	8	22	0	616	2,273
1:00 PM	2	17	209	8	0	0	22	223	8	0	0	4	12	23	0	0	6	8	19	0	561	2,241
1:15 PM	0	15	184	1	0	0	13	235	14	0	0	4	4	13	0	0	11	8	17	0	519	0
1:30 PM	2	13	220	3	0	0	14	261	13	0	0	4	2	17	0	0	7	6	15	0	577	0
1:45 PM	1	11	230	3	0	0	15	251	18	0	0	4	5	13	0	0	12	4	17	0	584	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	3	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	2	0	16
Lights	6	64	934	28	0	0	61	967	68	0	0	17	25	50	0	0	52	26	75	0	2,373
Mediums	0	1	19	1	0	0	2	31	0	0	0	1	1	1	0	0	1	0	7	0	65
Total	6	65	956	30	0	0	63	1,008	68	0	0	18	26	51	0	0	53	26	84	0	2,454
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.4%					0.9%					0.0%					1.2%			0.7%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	3.3%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.7%
Peak Hour Factor (PHF)			0.97					0.94					0.71					0.85			0.97
Peak Hour Factor (PHF)	0.67	0.77	0.96	0.89	0.00	0.25	0.70	0.91	0.77	0.00	0.25	0.79	0.69	0.72	0.00	0.00	0.69	0.68	0.91	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
11:15 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
11:30 AM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
11:45 AM	0	1	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
12:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	6
12:15 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights																					
11:00 AM	1	15	203	2	0	0	13	208	15	0	0	2	6	13	0	0	9	2	15	0	504
11:15 AM	3	12	194	1	0	1	16	200	11	0	1	4	2	17	0	0	6	4	18	0	490
11:30 AM	1	21	221	4	0	0	26	208	7	0	0	5	2	9	0	0	11	11	11	0	537
11:45 AM	3	9	215	7	0	0	15	217	15	0	0	5	4	20	0	0	14	7	11	0	542
12:00 PM	1	20	237	5	0	0	19	242	22	0	0	3	5	16	0	0	12	6	20	0	608
12:15 PM	1	14	240	9	0	0	8	268	17	0	0	6	4	12	0	0	10	6	17	0	612
12:30 PM	3	16	213	8	0	0	13	227	13	0	0	2	6	11	0	0	21	6	18	0	557
12:45 PM	1	14	244	6	0	0	21	230	16	0	0	6	10	11	0	0	9	8	20	0	596
1:00 PM	2	17	196	8	0	0	22	216	8	0	0	3	12	23	0	0	6	8	19	0	540
1:15 PM	0	14	179	1	0	0	12	227	14	0	0	4	4	13	0	0	11	8	17	0	504
1:30 PM	2	13	211	3	0	0	14	252	12	0	0	4	2	16	0	0	7	6	15	0	557
1:45 PM	1	11	224	3	0	0	14	245	18	0	0	4	5	13	0	0	11	4	17	0	570
Mediums																					
11:00 AM	0	0	6	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	16
11:15 AM	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	9
11:30 AM	0	1	4	0	0	0	2	5	0	0	0	0	0	1	0	0	0	0	0	0	13
11:45 AM	0	1	3	0	0	0	0	10	0	0	0	0	0	2	0	0	0	0	0	0	16
12:00 PM	0	0	1	1	0	0	0	7	0	0	0	0	0	1	0	0	1	0	1	0	12
12:15 PM	0	1	7	0	0	0	1	5	0	0	0	0	1	0	0	0	0	0	1	0	16
12:30 PM	0	0	7	0	0	0	0	9	0	0	0	1	0	0	0	0	0	0	3	0	20
12:45 PM	0	0	4	0	0	0	1	10	0	0	0	0	0	0	0	0	0	0	2	0	17
1:00 PM	0	0	12	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	19
1:15 PM	0	1	4	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	12
1:30 PM	0	0	7	0	0	0	0	8	1	0	0	0	0	1	0	0	0	0	0	0	17
1:45 PM	0	0	5	0	0	0	1	5	0	0	0	0	0	0	0	0	1	0	0	0	12
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	1	2	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	2	2	4	0	0	0
12:45 PM	0	0	0	0	0	0	1	1	2	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	2	2	4	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	2	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

4 GIRARD BLVD & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 15-Minutes
03:45 PM - 04:00 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	4	14	289	1	0	0	69	547	32	0	0	5	5	13	0	0	16	7	11	0	1,013	4,071
3:45 PM	3	30	312	3	0	0	74	528	24	0	0	4	11	25	0	0	12	9	23	0	1,058	3,968
4:00 PM	1	33	287	2	0	0	66	518	32	0	0	7	16	21	0	0	15	2	15	0	1,015	3,837
4:15 PM	4	29	274	1	0	0	68	519	20	0	0	3	17	17	0	0	12	6	15	0	985	3,690
4:30 PM	0	22	250	3	0	0	67	483	17	0	0	9	9	26	0	0	9	6	9	0	910	3,529
4:45 PM	2	18	232	1	0	0	69	511	20	0	0	5	14	16	0	0	8	8	23	0	927	3,295
5:00 PM	1	23	223	2	0	0	55	476	15	0	0	5	14	25	0	0	5	9	15	0	868	3,019
5:15 PM	0	18	272	3	0	0	33	416	15	0	0	4	6	22	0	0	12	3	20	0	824	2,776
5:30 PM	1	11	215	4	0	0	22	347	18	0	0	4	5	18	0	1	4	6	20	0	676	2,466
5:45 PM	3	16	207	0	0	0	24	329	11	0	0	1	7	11	0	0	16	5	21	0	651	0
6:00 PM	4	17	218	0	0	0	9	318	10	0	0	6	4	9	0	0	10	6	14	0	625	0
6:15 PM	0	13	156	2	0	0	19	276	11	0	0	2	7	7	0	0	7	3	11	0	514	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	6
Lights	12	103	1,134	7	0	0	275	2,072	106	0	0	19	49	75	0	0	54	22	63	0	3,991
Mediums	0	3	26	0	0	0	2	37	2	0	0	0	0	0	0	0	1	2	1	0	74
Total	12	106	1,162	7	0	0	277	2,112	108	0	0	19	49	76	0	0	55	24	64	0	4,071
Bicycles on Road	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.2%					0.1%					0.7%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.92					0.96					0.94					0.81			0.96
Peak Hour Factor (PHF)	0.75	0.86	0.93	0.63	0.00	0.00	0.94	0.97	0.84	0.00	0.00	0.67	0.82	0.86	0.00	0.25	0.86	0.81	0.85	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	4	13	279	1	0	0	68	540	31	0	0	5	5	13	0	0	16	7	10	0	992
3:45 PM	3	30	303	3	0	0	74	516	24	0	0	4	11	24	0	0	12	7	23	0	1034
4:00 PM	1	32	280	2	0	0	65	506	31	0	0	7	16	21	0	0	14	2	15	0	992
4:15 PM	4	28	272	1	0	0	68	510	20	0	0	3	17	17	0	0	12	6	15	0	973
4:30 PM	0	21	245	3	0	0	66	479	16	0	0	9	9	26	0	0	9	5	9	0	897
4:45 PM	2	18	230	1	0	0	69	501	20	0	0	5	14	16	0	0	8	8	23	0	915
5:00 PM	1	23	222	2	0	0	55	470	15	0	0	5	14	24	0	0	5	8	15	0	859
5:15 PM	0	18	271	3	0	0	33	411	15	0	0	4	6	22	0	0	12	3	19	0	817
5:30 PM	1	11	208	4	0	0	22	346	18	0	0	4	4	18	0	1	4	5	19	0	665
5:45 PM	3	16	206	0	0	0	24	326	11	0	0	1	7	11	0	0	16	5	21	0	647
6:00 PM	4	17	218	0	0	0	8	316	10	0	0	6	4	9	0	0	10	6	14	0	622
6:15 PM	0	13	154	1	0	0	19	270	11	0	0	2	7	7	0	0	7	3	11	0	505
Mediums																					
3:30 PM	0	1	8	0	0	0	1	6	1	0	0	0	0	0	0	0	0	0	1	0	18
3:45 PM	0	0	9	0	0	0	0	10	0	0	0	0	0	0	0	0	0	2	0	0	21
4:00 PM	0	1	7	0	0	0	1	12	1	0	0	0	0	0	0	0	1	0	0	0	23
4:15 PM	0	1	2	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	12
4:30 PM	0	1	3	0	0	0	0	3	1	0	0	0	0	0	0	0	0	1	0	0	9
4:45 PM	0	0	2	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	11
5:00 PM	0	0	1	0	0	0	0	6	0	0	0	0	0	1	0	0	0	1	0	0	9
5:15 PM	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	7
5:30 PM	0	0	6	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	10
5:45 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	2	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	2	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	1

All Traffic Data Services

5 YALE BLVD & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
08:00 AM - 08:15 AM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	28	329	31	0	0	24	87	18	0	0	13	52	28	0	0	23	13	10	0	656	3,076
6:15 AM	0	35	359	40	0	0	23	85	20	0	0	21	30	46	0	1	20	9	16	0	705	3,266
6:30 AM	0	16	479	43	0	0	28	160	8	0	0	16	5	42	0	0	18	7	26	0	848	3,442
6:45 AM	0	37	419	52	0	0	34	129	17	0	1	20	23	59	0	0	25	18	33	0	867	3,595
7:00 AM	0	23	440	61	0	0	29	121	8	0	0	24	18	52	0	0	23	20	27	0	846	3,842
7:15 AM	0	31	395	53	0	0	38	143	17	0	0	33	23	67	0	0	30	20	31	0	881	4,147
7:30 AM	0	36	359	94	0	1	62	205	16	0	0	45	22	74	0	0	28	19	40	0	1,001	4,171
7:45 AM	2	39	376	113	0	0	54	187	25	0	0	52	65	97	0	0	23	57	24	0	1,114	3,981
8:00 AM	2	44	384	75	0	1	64	236	20	0	1	49	63	103	0	0	27	49	33	0	1,151	3,610
8:15 AM	1	46	306	70	0	0	55	146	15	0	0	60	38	68	0	0	23	37	40	0	905	0
8:30 AM	0	18	297	65	0	0	44	175	12	0	0	26	40	58	0	0	18	20	38	0	811	0
8:45 AM	0	25	276	74	0	1	31	128	8	0	2	34	25	71	0	0	17	32	19	0	743	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	1	1	12	1	0	0	0	10	0	0	0	3	0	0	0	0	0	0	2	0	30
Lights	2	161	1,388	339	0	2	226	746	76	0	1	194	182	333	0	0	99	154	128	0	4,031
Mediums	2	3	25	12	0	0	9	18	0	0	0	9	6	9	0	0	2	8	7	0	110
Total	5	165	1,425	352	0	2	235	774	76	0	1	206	188	342	0	0	101	162	137	0	4,171
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.8%					0.9%					0.4%					0.5%			0.7%
Heavy Vehicle Percentage	20.0%	0.6%	0.8%	0.3%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.7%
Peak Hour Factor (PHF)			0.95					0.85					0.85					0.92			0.91
Peak Hour Factor (PHF)	0.63	0.90	0.90	0.78	0.00	0.50	0.92	0.82	0.78	0.00	0.38	0.86	0.79	0.83	0.00	0.25	0.90	0.71	0.86	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
6:30 AM	0	0	6	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	6
8:00 AM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
8:15 AM	1	1	1	1	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	12
8:30 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1	0	7
8:45 AM	0	1	1	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	7
Lights																					
6:00 AM	0	28	326	31	0	0	23	86	18	0	0	12	52	28	0	0	22	13	9	0	648
6:15 AM	0	35	355	40	0	0	22	83	20	0	0	17	30	45	0	1	19	9	15	0	691
6:30 AM	0	16	467	39	0	0	28	157	8	0	0	16	5	42	0	0	18	7	24	0	827
6:45 AM	0	37	410	52	0	0	34	123	17	0	1	19	23	59	0	0	25	17	32	0	849
7:00 AM	0	22	434	57	0	0	29	117	8	0	0	23	16	51	0	0	22	20	25	0	824
7:15 AM	0	29	385	53	0	0	37	138	17	0	0	30	23	65	0	0	30	19	30	0	856
7:30 AM	0	36	348	89	0	1	60	199	16	0	0	41	21	72	0	0	28	18	36	0	965
7:45 AM	1	38	371	110	0	0	50	184	25	0	0	49	64	94	0	0	22	54	21	0	1083
8:00 AM	1	43	371	74	0	1	64	229	20	0	1	48	60	102	0	0	27	48	32	0	1121
8:15 AM	0	44	298	66	0	0	52	134	15	0	0	56	37	65	0	0	22	34	39	0	862
8:30 AM	0	18	291	64	0	0	44	171	12	0	0	25	39	53	0	0	18	19	35	0	789
8:45 AM	0	23	258	73	0	1	31	118	8	0	2	31	25	68	0	0	16	29	19	0	702
Mediums																					
6:00 AM	0	0	3	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	6
6:15 AM	0	0	2	0	0	0	1	2	0	0	0	4	0	1	0	0	1	0	0	0	11
6:30 AM	0	0	6	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	12
6:45 AM	0	0	8	0	0	0	0	6	0	0	0	1	0	0	0	0	0	1	1	0	17
7:00 AM	0	1	3	3	0	0	0	4	0	0	0	1	2	1	0	0	1	0	2	0	18
7:15 AM	0	1	8	0	0	0	1	3	0	0	0	3	0	2	0	0	0	1	1	0	20
7:30 AM	0	0	6	5	0	0	2	6	0	0	0	3	1	2	0	0	0	1	4	0	30
7:45 AM	1	1	3	3	0	0	4	1	0	0	0	3	1	3	0	0	1	3	1	0	25
8:00 AM	1	1	9	1	0	0	0	5	0	0	0	1	3	1	0	0	0	1	1	0	24
8:15 AM	0	1	7	3	0	0	3	6	0	0	0	2	1	3	0	0	1	3	1	0	31
8:30 AM	0	0	3	1	0	0	0	2	0	0	0	1	1	4	0	0	0	1	2	0	15
8:45 AM	0	1	17	1	0	0	0	6	0	0	0	2	0	3	0	0	1	3	0	0	34
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	0	0	0	0	1	1
6:15 AM	0	0	0	0	0	0	0	1	1	0	1	1
6:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	1	1	0	1	1	0	0	0
7:15 AM	0	0	0	1	1	2	1	1	2	1	0	1
7:30 AM	0	0	0	0	1	1	0	1	1	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	1	0	1	1
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

5 YALE BLVD & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
11:45 AM - 12:45 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	14	170	39	0	0	38	193	9	0	0	59	42	59	0	0	16	27	25	0	691	2,784
11:15 AM	0	29	151	40	0	0	45	168	16	0	0	44	39	51	0	0	16	35	26	0	660	2,943
11:30 AM	0	25	159	41	0	0	35	171	15	0	0	57	42	74	0	0	12	34	27	0	692	3,087
11:45 AM	0	18	155	60	0	2	56	196	12	0	1	64	40	56	0	0	16	36	29	0	741	3,168
12:00 PM	0	22	191	54	0	0	50	233	17	0	0	79	65	60	0	0	22	28	29	0	850	3,157
12:15 PM	1	24	176	50	0	0	48	227	19	0	0	58	40	72	0	1	12	37	39	0	804	3,022
12:30 PM	0	17	182	59	0	0	36	213	18	0	0	57	39	68	0	0	12	34	38	0	773	2,886
12:45 PM	0	18	162	48	0	0	57	210	13	0	0	50	26	71	0	0	19	33	23	0	730	2,857
1:00 PM	0	21	169	39	0	0	50	193	19	0	0	58	37	56	0	0	11	25	37	0	715	2,897
1:15 PM	0	20	157	41	0	1	38	211	16	0	0	51	27	37	0	0	10	38	21	0	668	0
1:30 PM	0	21	171	57	0	0	42	223	7	0	0	59	28	56	0	0	8	37	35	0	744	0
1:45 PM	0	24	166	63	0	0	62	214	14	0	1	58	34	59	0	0	13	29	33	0	770	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	7	2	0	0	2	12	0	0	0	1	0	0	0	0	0	0	0	0	24
Lights	1	79	682	216	0	2	183	835	65	0	1	253	178	251	0	1	60	131	131	0	3,069
Mediums	0	2	15	5	0	0	5	22	1	0	0	4	6	5	0	0	2	4	4	0	75
Total	1	81	704	223	0	2	190	869	66	0	1	258	184	256	0	1	62	135	135	0	3,168
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.9%					1.2%					0.1%					0.0%			0.8%
Heavy Vehicle Percentage	0.0%	0.0%	1.0%	0.9%	0.0%	0.0%	1.1%	1.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Peak Hour Factor (PHF)			0.94					0.95					0.87					0.94			0.93
Peak Hour Factor (PHF)	0.25	0.81	0.93	0.93	0.00	0.25	0.77	0.95	0.91	0.00	0.25	0.82	0.72	0.94	0.00	0.25	0.75	0.91	0.88	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	9
11:15 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	3	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
12:00 PM	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
12:15 PM	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	3	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
12:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	4
Lights																					
11:00 AM	0	14	163	37	0	0	36	185	8	0	0	59	41	56	0	0	15	26	24	0	664
11:15 AM	0	28	144	39	0	0	44	163	16	0	0	40	37	49	0	0	16	32	26	0	634
11:30 AM	0	25	154	41	0	0	35	164	15	0	0	57	40	74	0	0	12	34	26	0	677
11:45 AM	0	17	147	57	0	2	54	187	12	0	1	63	40	56	0	0	16	34	28	0	714
12:00 PM	0	21	189	53	0	0	47	224	17	0	0	77	63	60	0	0	21	27	28	0	827
12:15 PM	1	24	170	48	0	0	47	220	19	0	0	56	39	68	0	1	12	36	38	0	779
12:30 PM	0	17	176	58	0	0	35	204	17	0	0	57	36	67	0	0	11	34	37	0	749
12:45 PM	0	17	156	48	0	0	57	192	13	0	0	50	25	69	0	0	19	32	23	0	701
1:00 PM	0	21	163	37	0	0	50	184	19	0	0	56	36	53	0	0	11	23	34	0	687
1:15 PM	0	20	150	39	0	1	38	206	16	0	0	50	25	36	0	0	10	37	21	0	649
1:30 PM	0	19	167	54	0	0	42	215	7	0	0	57	28	54	0	0	8	35	35	0	721
1:45 PM	0	24	162	62	0	0	62	207	13	0	1	55	34	57	0	0	12	29	33	0	751
Mediums																					
11:00 AM	0	0	2	2	0	0	2	5	1	0	0	0	1	2	0	0	1	1	1	0	18
11:15 AM	0	1	6	1	0	0	1	2	0	0	0	4	2	2	0	0	0	3	0	0	22
11:30 AM	0	0	4	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0	1	0	11
11:45 AM	0	1	5	2	0	0	2	4	0	0	0	1	0	0	0	0	0	2	1	0	18
12:00 PM	0	1	2	1	0	0	2	5	0	0	0	2	2	0	0	0	1	1	1	0	18
12:15 PM	0	0	5	2	0	0	1	5	0	0	0	1	1	4	0	0	0	1	1	0	21
12:30 PM	0	0	3	0	0	0	0	8	1	0	0	0	3	1	0	0	1	0	1	0	18
12:45 PM	0	1	5	0	0	0	0	16	0	0	0	0	1	2	0	0	0	1	0	0	26
1:00 PM	0	0	6	2	0	0	0	8	0	0	0	2	1	3	0	0	0	2	3	0	27
1:15 PM	0	0	4	2	0	0	0	4	0	0	0	1	2	1	0	0	0	1	0	0	15
1:30 PM	0	2	4	3	0	0	0	7	0	0	0	2	0	2	0	0	0	2	0	0	22
1:45 PM	0	0	2	1	0	0	0	6	1	0	0	2	0	2	0	0	1	0	0	0	15
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:45 PM	0	0	0	0	1	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	1	0	1	0	0	0	1	1	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

5 YALE BLVD & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 15-Minutes
03:30 PM - 03:45 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	1	35	228	42	0	0	77	478	24	0	0	74	54	104	0	0	44	60	71	0	1,292	4,750
3:45 PM	0	39	236	44	0	0	86	454	34	0	0	67	54	87	0	0	20	32	43	0	1,196	4,517
4:00 PM	0	38	234	38	0	0	75	456	32	0	0	75	51	71	0	0	20	36	51	0	1,177	4,415
4:15 PM	0	32	200	43	0	0	70	441	42	0	0	50	47	74	0	0	17	31	38	0	1,085	4,301
4:30 PM	0	24	151	48	0	0	45	423	26	0	0	90	62	92	0	0	20	45	33	0	1,059	4,181
4:45 PM	1	23	159	42	0	1	64	452	38	0	0	75	65	72	0	0	13	40	49	0	1,094	3,919
5:00 PM	3	28	162	38	0	0	73	416	41	0	0	84	45	70	0	0	13	40	50	0	1,063	3,648
5:15 PM	1	32	186	25	0	0	67	357	25	0	0	50	51	78	0	0	19	36	38	0	965	3,381
5:30 PM	2	40	139	23	0	0	61	279	35	0	0	45	33	65	0	0	12	25	38	0	797	3,062
5:45 PM	3	29	149	42	0	0	49	304	27	0	0	46	30	51	0	0	14	29	50	0	823	0
6:00 PM	1	26	157	28	0	0	47	285	14	0	0	48	42	58	0	0	16	27	47	0	796	0
6:15 PM	0	31	130	23	0	0	34	247	17	0	0	46	16	36	0	1	6	25	34	0	646	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	1	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	7
Lights	1	142	883	161	0	0	299	1,798	131	0	0	257	202	327	0	0	90	155	199	0	4,645
Mediums	0	2	14	5	0	0	9	28	1	0	0	7	4	9	0	0	11	4	4	0	98
Total	1	144	898	167	0	0	308	1,829	132	0	0	266	206	336	0	0	101	159	203	0	4,750
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.2%					0.1%					0.2%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.98					0.85					0.66			0.92
Peak Hour Factor (PHF)	0.75	0.92	0.95	0.90	0.00	0.25	0.90	0.96	0.88	0.00	0.00	0.83	0.87	0.81	0.00	0.25	0.57	0.89	0.71	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	4
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	1	35	224	41	0	0	74	473	24	0	0	71	52	101	0	0	36	58	69	0	1259
3:45 PM	0	38	233	43	0	0	84	445	33	0	0	63	54	83	0	0	20	31	43	0	1170
4:00 PM	0	38	230	35	0	0	71	448	32	0	0	73	49	70	0	0	17	36	50	0	1149
4:15 PM	0	31	196	42	0	0	70	432	42	0	0	50	47	73	0	0	17	30	37	0	1067
4:30 PM	0	24	149	46	0	0	45	419	26	0	0	89	60	89	0	0	20	45	32	0	1044
4:45 PM	1	22	159	42	0	1	64	442	37	0	0	74	63	72	0	0	13	39	49	0	1078
5:00 PM	3	28	161	37	0	0	73	412	41	0	0	84	44	70	0	0	13	40	49	0	1055
5:15 PM	1	31	185	25	0	0	67	352	25	0	0	50	50	78	0	0	18	35	37	0	954
5:30 PM	2	39	136	23	0	0	61	277	35	0	0	45	32	64	0	0	12	25	38	0	789
5:45 PM	3	27	148	42	0	0	49	304	26	0	0	45	30	51	0	0	14	28	49	0	816
6:00 PM	1	26	157	28	0	0	46	281	14	0	0	48	41	58	0	0	16	27	45	0	788
6:15 PM	0	29	129	23	0	0	33	241	17	0	0	46	16	35	0	1	5	23	34	0	632
Mediums																					
3:30 PM	0	0	3	1	0	0	3	4	0	0	0	1	2	3	0	0	8	2	2	0	29
3:45 PM	0	1	3	1	0	0	2	7	1	0	0	4	0	4	0	0	0	1	0	0	24
4:00 PM	0	0	4	3	0	0	4	8	0	0	0	2	2	1	0	0	3	0	1	0	28
4:15 PM	0	1	4	0	0	0	0	9	0	0	0	0	0	1	0	0	0	1	1	0	17
4:30 PM	0	0	1	2	0	0	0	3	0	0	0	1	2	2	0	0	0	0	1	0	12
4:45 PM	0	1	0	0	0	0	0	9	1	0	0	1	2	0	0	0	0	1	0	0	15
5:00 PM	0	0	1	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	1	0	7
5:15 PM	0	1	1	0	0	0	0	5	0	0	0	0	1	0	0	0	1	1	1	0	11
5:30 PM	0	1	2	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	7
5:45 PM	0	2	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0	7
6:00 PM	0	0	0	0	0	0	1	4	0	0	0	0	1	0	0	0	0	0	2	0	8
6:15 PM	0	2	1	0	0	0	1	6	0	0	0	0	0	1	0	0	1	2	0	0	14
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	1	0	0	0	1	0	1
4:15 PM	0	0	0	1	0	1	0	0	0	0	1	1
4:30 PM	0	0	0	3	1	4	0	1	1	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	1	2	3	1	2	3	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
6:00 PM	0	0	0	5	1	6	3	0	3	0	1	1
6:15 PM	0	2	2	0	0	0	0	1	1	0	0	0

All Traffic Data Services

6 WASHINGTON ST & LOMAS BLVD AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	3	28	2	0	0	4	48	1	0	0	2	9	2	0	0	1	8	5	0	113	689
6:15 AM	0	1	31	1	0	0	1	53	4	0	0	5	8	1	0	0	2	5	6	0	118	858
6:30 AM	0	4	50	4	0	0	2	83	3	0	0	6	6	5	0	0	2	4	7	0	176	1,136
6:45 AM	0	14	81	3	0	0	7	117	9	0	0	7	10	6	0	0	4	17	7	0	282	1,506
7:00 AM	0	10	83	11	0	0	5	104	2	0	0	5	15	3	0	0	14	22	8	0	282	1,712
7:15 AM	1	10	96	5	0	0	7	173	12	0	0	3	28	9	0	0	20	15	17	0	396	1,912
7:30 AM	1	23	143	11	0	0	16	204	17	0	0	19	33	19	0	0	14	27	19	0	546	1,996
7:45 AM	0	12	113	9	0	0	8	233	14	0	0	12	28	14	0	0	13	22	10	0	488	1,909
8:00 AM	0	13	146	9	0	0	11	188	10	0	0	17	36	15	0	0	6	21	10	0	482	1,882
8:15 AM	0	13	113	10	0	0	9	206	12	0	0	20	27	8	0	0	15	29	18	0	480	0
8:30 AM	0	9	124	11	0	0	15	179	13	0	0	12	20	11	0	0	20	33	12	0	459	0
8:45 AM	0	13	158	22	0	0	8	149	8	0	0	12	26	15	0	0	14	28	8	0	461	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	1	61	508	38	0	0	43	821	53	0	0	67	124	55	0	0	48	98	57	0	1,974
Mediums	0	0	6	1	0	0	1	10	0	0	0	1	0	1	0	0	0	1	0	0	21
Total	1	61	515	39	0	0	44	831	53	0	0	68	124	56	0	0	48	99	57	0	1,996
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Bicycles on Crosswalk			2					0					0					2			4
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.83					0.91					0.87					0.82			5.80
Peak Hour Factor (PHF)	0.50	0.66	0.86	0.59	0.00	0.00	0.69	0.89	0.78	0.00	0.00	0.85	0.87	0.75	0.00	0.00	0.76	0.84	0.75	0.00	5.80

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	3	26	2	0	0	4	46	1	0	0	2	9	2	0	0	1	8	4	0	108
6:15 AM	0	1	31	1	0	0	1	50	4	0	0	5	8	1	0	0	2	5	6	0	115
6:30 AM	0	4	50	4	0	0	2	83	3	0	0	6	6	5	0	0	1	4	7	0	175
6:45 AM	0	14	78	3	0	0	7	116	9	0	0	7	10	6	0	0	3	16	7	0	276
7:00 AM	0	10	82	11	0	0	5	102	2	0	0	5	15	3	0	0	14	21	8	0	278
7:15 AM	1	9	90	5	0	0	7	171	12	0	0	3	27	9	0	0	20	15	16	0	385
7:30 AM	1	23	141	11	0	0	16	200	17	0	0	19	33	19	0	0	14	27	19	0	540
7:45 AM	0	12	112	8	0	0	7	231	14	0	0	12	28	14	0	0	13	22	10	0	483
8:00 AM	0	13	143	9	0	0	11	186	10	0	0	16	36	14	0	0	6	21	10	0	475
8:15 AM	0	13	112	10	0	0	9	204	12	0	0	20	27	8	0	0	15	28	18	0	476
8:30 AM	0	9	120	11	0	0	15	175	13	0	0	12	19	10	0	0	20	33	12	0	449
8:45 AM	0	13	156	22	0	0	8	143	8	0	0	11	26	15	0	0	14	27	7	0	450
Mediums																					
6:00 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	5
6:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
6:45 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	5
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
7:15 AM	0	1	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	9
7:30 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	3	0	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	7
8:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	4
8:30 AM	0	0	4	0	0	0	0	4	0	0	0	0	1	1	0	0	0	0	0	0	10
8:45 AM	0	0	2	0	0	0	0	6	0	0	0	1	0	0	0	0	0	1	1	0	11
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	4
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:45 AM	2	0	2	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	1	0	1	1	2	3	0	0	0	2	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	1	0	1	0	3	3	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:45 AM	1	0	1	0	0	0	1	0	1	1	1	2

All Traffic Data Services

6 WASHINGTON ST & LOMAS BLVD Noon
Wednesday, May 8, 2024

Peak Hour
12:15 PM - 01:15 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	1	17	179	7	0	0	13	152	10	0	0	12	24	20	0	0	12	20	12	0	479	1,981
11:15 AM	0	14	184	14	0	0	12	168	16	0	0	3	21	18	0	0	18	33	10	0	511	2,002
11:30 AM	0	8	190	10	0	0	8	121	8	0	0	11	34	15	0	0	16	34	6	0	461	2,062
11:45 AM	2	7	178	14	0	0	23	154	16	0	0	18	40	14	0	0	15	35	14	0	530	2,140
12:00 PM	0	13	169	11	0	0	10	176	12	0	0	9	25	14	0	0	12	35	14	0	500	2,186
12:15 PM	0	17	225	13	0	0	17	161	14	0	0	8	37	14	0	0	15	34	16	0	571	2,228
12:30 PM	0	18	181	16	0	0	14	174	11	0	0	10	32	15	0	0	18	38	12	0	539	2,215
12:45 PM	3	19	200	15	0	0	11	170	15	0	0	10	38	19	0	0	14	51	11	0	576	2,206
1:00 PM	0	12	192	12	0	0	12	159	18	0	0	12	38	22	0	0	13	40	12	0	542	2,176
1:15 PM	0	18	195	15	0	0	18	180	16	0	0	15	33	15	0	0	17	30	6	0	558	0
1:30 PM	0	12	218	13	0	0	14	151	9	0	0	14	36	10	0	0	12	33	8	0	530	0
1:45 PM	0	16	178	11	0	0	17	176	14	0	0	7	40	21	0	0	13	36	17	0	546	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	3	66	790	56	0	0	54	651	57	0	0	40	145	70	0	0	60	162	51	0	2,205
Mediums	0	0	8	0	0	0	0	12	1	0	0	0	0	0	0	0	0	1	0	0	22
Total	3	66	798	56	0	0	54	664	58	0	0	40	145	70	0	0	60	163	51	0	2,228
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Bicycles on Crosswalk			0					0					0					2			2
Heavy Vehicle Percentage			0.0%					0.1%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.95					0.93					0.91					0.90			0.97
Peak Hour Factor (PHF)	0.25	0.88	0.92	0.91	0.00	0.00	0.70	0.95	0.83	0.00	0.00	0.85	0.92	0.81	0.00	0.00	0.86	0.80	0.88	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	1	15	174	6	0	0	13	141	10	0	0	11	24	20	0	0	12	20	10	0	457
11:15 AM	0	14	182	14	0	0	12	167	16	0	0	3	21	18	0	0	18	33	9	0	507
11:30 AM	0	8	185	10	0	0	8	118	8	0	0	11	34	15	0	0	16	34	6	0	453
11:45 AM	2	7	175	14	0	0	23	153	16	0	0	18	40	14	0	0	14	35	14	0	525
12:00 PM	0	13	165	11	0	0	10	174	12	0	0	9	25	14	0	0	12	34	13	0	492
12:15 PM	0	17	224	13	0	0	17	158	14	0	0	8	37	14	0	0	15	34	16	0	567
12:30 PM	0	18	180	16	0	0	14	172	11	0	0	10	32	15	0	0	18	38	12	0	536
12:45 PM	3	19	197	15	0	0	11	167	15	0	0	10	38	19	0	0	14	50	11	0	569
1:00 PM	0	12	189	12	0	0	12	154	17	0	0	12	38	22	0	0	13	40	12	0	533
1:15 PM	0	18	190	15	0	0	18	176	16	0	0	15	32	13	0	0	17	30	5	0	545
1:30 PM	0	12	210	13	0	0	14	149	8	0	0	13	36	10	0	0	12	32	8	0	517
1:45 PM	0	16	176	11	0	0	17	176	14	0	0	7	40	20	0	0	12	36	16	0	541
Mediums																					
11:00 AM	0	2	4	1	0	0	0	10	0	0	0	1	0	0	0	0	0	0	2	0	20
11:15 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	4
11:30 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
11:45 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	4
12:00 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	8
12:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	7
1:00 PM	0	0	3	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	9
1:15 PM	0	0	5	0	0	0	0	4	0	0	0	0	1	1	0	0	0	0	1	0	12
1:30 PM	0	0	7	0	0	0	0	2	1	0	0	1	0	0	0	0	0	1	0	0	12
1:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	5
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	1	2	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	1	0	1	1	0	1	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	1	2	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	2	0	2	0	0	0	2	1	3	0	0	0
12:00 PM	0	0	0	0	1	1	1	0	1	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	2	0	2	0	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	1	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	1	1	2	0	0	0	0	1	1	1	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

6 WASHINGTON ST & LOMAS BLVD PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	11	204	12	0	0	15	175	11	0	0	11	27	17	0	0	16	41	6	0	546	2,583
3:45 PM	0	16	225	16	0	0	22	182	9	0	0	11	46	21	0	0	12	51	10	0	621	2,824
4:00 PM	0	10	226	22	0	0	19	197	16	0	0	12	61	33	0	0	17	35	8	0	656	2,935
4:15 PM	0	20	259	14	0	0	21	269	21	0	0	11	43	18	0	0	11	61	12	0	760	3,005
4:30 PM	0	12	259	20	0	0	19	282	18	0	0	18	46	17	0	0	16	69	11	0	787	3,017
4:45 PM	1	24	243	20	0	0	21	262	13	0	0	12	39	16	0	0	16	62	3	0	732	2,921
5:00 PM	1	12	262	15	0	0	18	222	12	0	0	17	50	28	0	0	15	62	12	0	726	2,776
5:15 PM	1	21	291	19	0	0	27	247	16	0	0	10	44	26	0	0	8	49	13	0	772	2,587
5:30 PM	0	12	220	16	0	0	20	248	11	0	0	15	37	19	0	0	17	63	13	0	691	2,305
5:45 PM	1	13	180	13	0	0	26	223	9	0	0	6	33	18	0	0	5	52	8	0	587	0
6:00 PM	0	9	167	12	0	0	18	184	13	0	0	13	35	17	0	0	6	52	11	0	537	0
6:15 PM	0	10	166	10	0	0	12	182	9	0	0	9	31	12	0	0	11	31	7	0	490	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	3	69	1,051	72	0	0	85	1,003	58	0	0	56	176	87	0	0	55	240	39	0	2,994
Mediums	0	0	4	2	0	0	0	8	1	0	0	1	3	0	0	0	0	2	0	0	21
Total	3	69	1,055	74	0	0	85	1,013	59	0	0	57	179	87	0	0	55	242	39	0	3,017
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	5	0	0	13
Bicycles on Crosswalk			3					1					0					0			4
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.90					0.92					0.79					0.91			0.96
Peak Hour Factor (PHF)	0.75	0.72	0.91	0.86	0.00	0.00	0.84	0.92	0.81	0.00	0.00	0.81	0.80	0.81	0.00	0.00	0.88	0.92	0.88	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	11	202	12	0	0	15	175	11	0	0	10	27	17	0	0	16	41	6	0	543
3:45 PM	0	14	220	16	0	0	22	175	9	0	0	11	46	21	0	0	12	51	10	0	607
4:00 PM	0	10	224	22	0	0	19	195	16	0	0	12	60	33	0	0	17	35	8	0	651
4:15 PM	0	20	257	13	0	0	21	265	21	0	0	11	43	18	0	0	11	60	12	0	752
4:30 PM	0	12	258	19	0	0	19	279	18	0	0	18	45	17	0	0	16	68	11	0	780
4:45 PM	1	24	242	20	0	0	21	261	13	0	0	12	39	16	0	0	16	62	3	0	730
5:00 PM	1	12	261	15	0	0	18	220	11	0	0	16	48	28	0	0	15	61	12	0	718
5:15 PM	1	21	290	18	0	0	27	243	16	0	0	10	44	26	0	0	8	49	13	0	766
5:30 PM	0	12	219	16	0	0	20	245	11	0	0	15	36	19	0	0	17	63	13	0	686
5:45 PM	1	13	179	13	0	0	26	223	9	0	0	6	32	18	0	0	5	51	8	0	584
6:00 PM	0	9	166	11	0	0	18	182	13	0	0	13	35	17	0	0	6	52	10	0	532
6:15 PM	0	10	166	10	0	0	12	180	9	0	0	9	31	12	0	0	11	31	7	0	488
Mediums																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
3:45 PM	0	2	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	14
4:00 PM	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	5
4:15 PM	0	0	2	1	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	8
4:30 PM	0	0	1	1	0	0	0	3	0	0	0	0	1	0	0	0	0	1	0	0	7
4:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	1	0	0	0	0	1	1	0	0	1	2	0	0	0	0	1	0	0	7
5:15 PM	0	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	1	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	5
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
6:00 PM	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	5
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	2	2	0	0	0	0	0	0	0	0	0
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	0	2	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:00 PM	3	0	3	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	1	2	0	2
5:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

7 CARLISLE BLVD & LOMAS BLVD AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LOMAS BLVD						CARLISLE BLVD						MONTE VISTA BLVD						LOMAS BLVD						CARLISLE BLVD							
	Westbound						Northbound						Northeastbound						Eastbound						Southbound							
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total	Rolling Hour
6:00 AM	0	3	1	51	8	0	0	0	3	16	1	0	0	0	3	0	0	0	0	5	20	1	0	0	0	8	13	2	11	0	146	906
6:15 AM	0	0	5	52	8	0	0	0	3	14	3	0	0	0	5	1	0	0	0	2	30	2	0	0	0	6	12	5	10	0	158	1,117
6:30 AM	0	2	8	86	10	0	0	0	3	20	3	0	0	0	11	1	1	0	0	3	48	0	0	0	0	6	23	2	19	0	246	1,476
6:45 AM	0	4	7	120	18	0	0	0	2	21	2	0	0	0	6	5	1	0	0	17	66	1	0	0	0	13	27	16	30	0	356	1,818
7:00 AM	0	3	16	100	15	0	0	0	2	19	2	0	0	0	12	10	0	0	0	17	66	1	0	0	0	10	44	23	17	0	357	2,093
7:15 AM	0	8	32	125	19	0	0	0	8	38	4	0	0	0	17	13	0	0	0	12	92	5	1	0	0	16	52	38	37	0	517	2,292
7:30 AM	0	3	16	191	26	0	0	0	8	39	1	0	0	0	36	33	0	0	0	26	103	4	0	0	0	15	35	18	34	0	588	2,389
7:45 AM	0	2	14	241	27	0	0	0	6	49	6	0	0	0	19	16	0	0	0	17	92	3	2	0	0	22	50	24	41	0	631	2,376
8:00 AM	0	5	19	176	19	0	0	0	14	48	2	0	0	0	26	15	0	0	0	15	115	0	1	0	0	19	39	16	27	0	556	2,332
8:15 AM	0	10	25	202	17	0	0	0	11	41	2	0	0	0	28	23	0	0	0	20	105	6	1	0	0	23	42	33	25	0	614	0
8:30 AM	0	3	17	173	24	0	0	0	14	45	8	0	0	0	20	15	0	0	0	17	101	6	1	0	0	24	49	35	23	0	575	0
8:45 AM	0	9	23	128	16	0	0	0	10	45	8	0	0	0	25	20	0	0	0	25	142	6	1	0	0	18	47	30	34	0	587	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Vehicle Type	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
Lights	0	20	73	800	89	0	0	0	39	175	11	0	0	0	106	87	0	0	0	76	408	13	4	0	0	75	163	90	124	0	2,353
Mediums	0	0	1	9	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	2	7	0	0	0	0	3	3	1	3	0	34
Total	0	20	74	810	89	0	0	0	39	177	11	0	0	0	109	87	0	0	0	78	415	13	4	0	0	79	166	91	127	0	2,389
Bicycles on Road	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			2						0						0						0						3				5
Heavy Vehicle Percentage			0.0%						0.0%						0.0%						0.0%						0.0%				
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Peak Hour Factor (PHF)			0.87						0.93						0.71						0.81						0.90				0.95
Peak Hour Factor (PHF)	0.00	0.68	0.84	0.84	0.84	0.00	0.00	0.00	0.88	0.93	0.63	0.00	0.00	0.00	0.76	0.66	0.50	0.00	0.00	0.75	0.82	0.75	0.63	0.00	0.00	0.92	0.87	0.81	0.85	0.00	0.95

Traffic Counts by Vehicle Type

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks																															
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																															
6:00 AM	0	3	1	49	8	0	0	0	3	16	1	0	0	0	3	0	0	0	0	3	19	1	0	0	0	8	13	2	10	0	140
6:15 AM	0	0	4	51	8	0	0	0	3	14	3	0	0	0	5	1	0	0	0	2	30	2	0	0	0	6	12	5	10	0	156
6:30 AM	0	2	8	86	10	0	0	0	3	20	3	0	0	0	10	1	1	0	0	3	47	0	0	0	0	5	23	2	17	0	241
6:45 AM	0	4	7	120	18	0	0	0	2	21	2	0	0	0	6	5	1	0	0	16	65	1	0	0	0	12	25	15	30	0	350
7:00 AM	0	3	16	99	15	0	0	0	2	18	2	0	0	0	12	10	0	0	0	17	66	1	0	0	0	9	42	22	17	0	351
7:15 AM	0	8	31	124	19	0	0	0	6	36	3	0	0	0	17	13	0	0	0	11	86	5	1	0	0	15	48	38	35	0	496
7:30 AM	0	3	15	190	26	0	0	0	8	38	1	0	0	0	35	33	0	0	0	26	101	4	0	0	0	15	34	18	33	0	580
7:45 AM	0	2	14	237	27	0	0	0	6	49	6	0	0	0	19	16	0	0	0	17	90	3	2	0	0	21	49	24	39	0	621
8:00 AM	0	5	19	174	19	0	0	0	14	48	2	0	0	0	26	15	0	0	0	14	113	0	1	0	0	18	39	15	27	0	549
8:15 AM	0	10	25	199	17	0	0	0	11	40	2	0	0	0	26	23	0	0	0	19	104	6	1	0	0	21	41	33	25	0	603
8:30 AM	0	3	17	170	23	0	0	0	14	44	8	0	0	0	19	15	0	0	0	17	98	6	1	0	0	24	47	34	22	0	562
8:45 AM	0	9	22	125	16	0	0	0	9	45	8	0	0	0	25	20	0	0	0	23	139	6	1	0	0	18	45	30	34	0	575
Mediums																															
6:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	6
6:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	2	1	0	0	6
7:00 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4
7:15 AM	0	0	1	1	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	1	5	0	0	0	0	1	4	0	2	0	20
7:30 AM	0	0	1	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	1	0	8
7:45 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	2	0	9
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	1	0	0	7
8:15 AM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	2	1	0	0	0	10
8:30 AM	0	0	0	3	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	10
8:45 AM	0	0	1	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	2	0	0	0	12
Bicycles on Road																															
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2

Bicycles on Crosswalk

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

All Traffic Data Services

7 CARLISLE BLVD & LOMAS BLVD Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	LOMAS BLVD						CARLISLE BLVD						MONTE VISTA BLVD						LOMAS BLVD						CARLISLE BLVD							
	Westbound						Northbound						Northeastbound						Eastbound						Southbound							
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total	Rolling Hour
11:00 AM	0	10	14	130	27	0	0	0	4	54	10	0	0	0	22	25	0	0	0	25	181	2	2	0	0	20	37	47	20	0	630	2,412
11:15 AM	0	9	15	134	27	0	0	0	11	42	6	0	0	0	27	19	0	0	0	27	150	10	0	0	0	22	42	27	21	0	589	2,415
11:30 AM	0	8	20	117	17	0	0	0	5	50	8	0	0	0	29	30	0	0	0	24	138	5	0	0	0	24	65	20	25	0	585	2,473
11:45 AM	0	12	23	137	19	0	0	0	6	43	13	0	0	0	36	15	0	0	0	25	161	5	2	0	0	17	50	18	26	0	608	2,522
12:00 PM	0	8	22	144	26	0	0	1	4	55	7	0	0	0	27	27	0	0	0	35	128	12	0	0	0	32	44	31	30	0	633	2,545
12:15 PM	1	5	18	123	28	0	0	0	9	61	13	0	0	0	29	21	0	0	0	35	163	10	0	0	0	30	52	22	27	0	647	2,515
12:30 PM	0	7	18	140	14	0	0	0	10	46	8	0	0	0	33	35	1	0	0	23	143	5	1	0	0	34	61	21	34	0	634	2,508
12:45 PM	0	11	21	146	28	0	0	0	3	55	13	0	0	0	25	21	0	0	0	24	165	6	1	0	0	30	41	22	19	0	631	2,479
1:00 PM	0	5	12	132	17	0	0	0	7	54	2	0	0	0	39	36	0	0	0	26	123	6	1	0	0	26	60	21	36	0	603	2,507
1:15 PM	0	5	14	147	20	0	0	0	8	55	6	0	0	0	35	25	0	0	0	40	153	2	0	0	0	24	48	28	30	0	640	0
1:30 PM	0	6	17	113	23	0	0	0	5	41	11	0	0	0	32	33	0	0	0	29	158	6	0	0	0	25	57	19	30	0	605	0
1:45 PM	0	7	21	161	30	0	0	0	5	61	8	0	0	0	33	20	0	0	0	30	145	7	0	0	0	34	48	29	20	0	659	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Vehicle Type	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	1	30	78	550	96	0	0	1	25	217	41	0	0	0	113	103	1	0	0	116	595	32	2	0	0	126	196	95	104	0	2,522
Mediums	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	4	1	0	0	0	0	2	1	6	0	21
Total	1	31	79	553	96	0	0	1	26	217	41	0	0	0	114	104	1	0	0	117	599	33	2	0	0	126	198	96	110	0	2,545
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Bicycles on Crosswalk			0						0						0						1						0				1
Heavy Vehicle Percentage			0.1%						0.4%						0.0%						0.0%						0.0%				0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.92						0.86						0.84						0.90						0.89				0.98
Peak Hour Factor (PHF)	0.25	0.81	0.90	0.96	0.86	0.00	0.00	0.25	0.73	0.89	0.79	0.00	0.00	0.00	0.89	0.81	0.25	0.00	0.00	0.78	0.87	0.69	0.50	0.00	0.00	0.93	0.88	0.60	0.83	0.00	0.98

Traffic Counts by Vehicle Type

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks																															
11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Lights																															
11:00 AM	0	9	13	125	27	0	0	0	4	53	10	0	0	0	22	25	0	0	0	24	178	2	2	0	0	19	37	46	20	0	616
11:15 AM	0	9	15	133	27	0	0	0	11	41	6	0	0	0	27	19	0	0	0	27	149	10	0	0	0	22	42	26	20	0	584
11:30 AM	0	7	20	115	17	0	0	0	5	50	8	0	0	0	27	30	0	0	0	24	135	5	0	0	0	24	64	20	24	0	575
11:45 AM	0	12	23	136	19	0	0	0	6	41	12	0	0	0	36	15	0	0	0	24	160	5	2	0	0	17	48	18	25	0	599
12:00 PM	0	7	21	144	26	0	0	1	3	55	7	0	0	0	27	27	0	0	0	35	126	12	0	0	0	32	44	30	27	0	624
12:15 PM	1	5	18	122	28	0	0	0	9	61	13	0	0	0	28	20	0	0	0	35	163	9	0	0	0	30	52	22	26	0	642
12:30 PM	0	7	18	138	14	0	0	0	10	46	8	0	0	0	33	35	1	0	0	22	143	5	1	0	0	34	60	21	33	0	629
12:45 PM	0	11	21	146	28	0	0	0	3	55	13	0	0	0	25	21	0	0	0	24	163	6	1	0	0	30	40	22	18	0	627
1:00 PM	0	5	12	130	17	0	0	0	7	54	2	0	0	0	39	36	0	0	0	25	120	6	1	0	0	26	59	21	36	0	596
1:15 PM	0	5	14	143	18	0	0	0	7	55	5	0	0	0	35	25	0	0	0	38	151	2	0	0	0	24	46	28	29	0	625
1:30 PM	0	6	17	110	23	0	0	0	5	40	10	0	0	0	32	33	0	0	0	29	151	6	0	0	0	24	57	18	30	0	591
1:45 PM	0	7	21	161	30	0	0	0	5	61	8	0	0	0	33	20	0	0	0	28	143	7	0	0	0	34	46	29	20	0	653
Mediums																															
11:00 AM	0	1	1	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	1	0	0	12
11:15 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	5
11:30 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0	1	0	1	0	10
11:45 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	1	0	7
12:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	0	8
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	4
12:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	5
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	1	0	4
1:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	1	0	0	0	7
1:15 PM	0	0	0	4	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	1	0	15
1:30 PM	0	0	0	3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	0	1	0	0	13
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	0	0	5
Bicycles on Road																															
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	1	1	0	1	1	0	1	1	0	0	0	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
11:45 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	1	0	1	1	1	2	3	0	0	0	2	3	5
12:15 PM	2	0	2	2	1	3	2	1	3	0	1	1	2	1	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	2	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

All Traffic Data Services

7 CARLISLE BLVD & LOMAS BLVD PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	LOMAS BLVD						CARLISLE BLVD						MONTE VISTA BLVD						LOMAS BLVD						CARLISLE BLVD							
	Westbound						Northbound						Northeastbound						Eastbound						Southbound							
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total	Rolling Hour
3:30 PM	0	4	13	136	29	0	0	0	5	64	7	0	0	0	42	32	0	0	0	38	198	6	2	0	0	27	60	20	14	0	697	2,973
3:45 PM	0	7	19	133	26	0	0	0	9	76	3	0	0	0	29	17	1	0	0	37	186	8	0	0	0	37	65	32	30	0	715	3,144
4:00 PM	0	11	10	170	24	0	0	0	17	71	6	0	0	0	42	26	1	0	0	41	195	7	0	0	0	16	60	37	39	0	773	3,292
4:15 PM	0	9	19	182	27	0	0	0	10	62	3	0	0	0	42	33	0	0	0	36	196	16	0	0	0	29	60	33	31	0	788	3,375
4:30 PM	0	4	28	220	27	0	0	0	14	56	8	0	0	0	45	39	0	0	0	34	224	11	0	0	0	30	63	36	29	0	868	3,432
4:45 PM	0	3	28	253	22	0	0	0	9	62	9	0	0	0	43	31	0	0	0	33	222	7	0	0	0	29	55	27	30	0	863	3,383
5:00 PM	0	6	29	185	21	0	0	0	7	73	7	0	1	0	33	34	0	0	0	42	227	15	0	0	0	26	64	49	37	0	856	3,259
5:15 PM	0	7	22	192	22	0	0	0	11	72	7	0	0	0	53	34	0	0	0	28	236	11	0	0	0	32	54	35	29	0	845	3,055
5:30 PM	0	12	23	223	19	0	0	0	14	65	7	0	0	0	40	28	0	0	0	38	193	16	0	0	0	26	60	30	25	0	819	2,825
5:45 PM	0	9	35	180	20	0	0	0	8	63	4	0	0	0	37	28	0	0	0	27	155	7	0	0	0	18	58	48	42	0	739	0
6:00 PM	0	5	32	151	24	0	0	0	11	43	8	0	0	0	38	22	0	0	0	22	135	4	0	0	0	25	70	43	19	0	652	0
6:15 PM	0	9	30	148	15	0	0	0	7	56	11	0	0	0	38	26	0	0	0	24	107	4	0	0	0	21	61	43	15	0	615	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Vehicle Type	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	20	107	836	92	0	0	0	41	260	30	0	1	0	174	138	0	0	0	135	905	44	0	0	0	117	234	147	122	0	3,403
Mediums	0	0	0	12	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	2	0	3	0	27
Total	0	20	107	850	92	0	0	0	41	263	31	0	1	0	174	138	0	0	0	137	909	44	0	0	0	117	236	147	125	0	3,432
Bicycles on Road	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
Bicycles on Crosswalk			0						0						0						1						0				1
Heavy Vehicle Percentage			0.2%						0.0%						0.0%						0.0%						0.0%				0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.87						0.95						0.90						0.96						0.90				0.99
Peak Hour Factor (PHF)	0.00	0.73	0.86	0.84	0.91	0.00	0.00	0.00	0.74	0.90	0.86	0.00	0.25	0.00	0.82	0.88	0.50	0.00	0.00	0.93	0.96	0.77	0.25	0.00	0.00	0.91	0.89	0.85	0.79	0.00	0.99

Traffic Counts by Vehicle Type

	Westbound						Northbound						Northeastbound						Eastbound						Southbound						
Time	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	Total
Articulated Trucks																															
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																															
3:30 PM	0	4	13	135	29	0	0	0	5	63	7	0	0	0	42	32	0	0	0	38	195	6	2	0	0	27	58	19	13	0	688
3:45 PM	0	7	19	128	26	0	0	0	9	74	2	0	0	0	29	16	1	0	0	36	181	8	0	0	0	36	65	32	29	0	698
4:00 PM	0	11	10	167	24	0	0	0	16	69	6	0	0	0	42	26	1	0	0	40	195	7	0	0	0	15	59	37	38	0	763
4:15 PM	0	9	19	178	27	0	0	0	10	60	3	0	0	0	42	33	0	0	0	36	192	16	0	0	0	29	60	33	30	0	777
4:30 PM	0	4	28	215	27	0	0	0	14	56	8	0	0	0	45	39	0	0	0	33	223	11	0	0	0	30	62	36	27	0	858
4:45 PM	0	3	28	251	22	0	0	0	9	61	9	0	0	0	43	31	0	0	0	33	221	7	0	0	0	29	54	27	29	0	857
5:00 PM	0	6	29	181	21	0	0	0	7	72	6	0	1	0	33	34	0	0	0	41	226	15	0	0	0	26	64	49	37	0	848
5:15 PM	0	7	22	189	22	0	0	0	11	71	7	0	0	0	53	34	0	0	0	28	235	11	0	0	0	32	54	35	29	0	840
5:30 PM	0	11	23	220	19	0	0	0	14	64	7	0	0	0	39	28	0	0	0	38	192	16	0	0	0	26	60	30	24	0	811
5:45 PM	0	9	35	180	20	0	0	0	8	63	4	0	0	0	37	28	0	0	0	26	153	7	0	0	0	18	58	48	42	0	736
6:00 PM	0	5	31	147	24	0	0	0	11	43	8	0	0	0	38	22	0	0	0	22	135	4	0	0	0	24	70	43	18	0	645
6:15 PM	0	9	29	148	15	0	0	0	7	56	11	0	0	0	38	26	0	0	0	23	107	4	0	0	0	21	61	43	15	0	613
Mediums																															
3:30 PM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	1	1	0	9
3:45 PM	0	0	0	5	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	1	5	0	0	0	0	1	0	0	1	0	17
4:00 PM	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	10
4:15 PM	0	0	0	4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	11
4:30 PM	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	2	0	10
4:45 PM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	6
5:00 PM	0	0	0	3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	7
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																															
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Westbound			Northbound			Northeastbound			Eastbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0
3:45 PM	1	2	3	0	0	0	1	0	1	1	0	1	2	1	3
4:00 PM	0	1	1	1	0	1	0	0	0	0	0	0	1	4	5
4:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	2	2	0	0	0	1	0	1	0	1	1
4:45 PM	0	1	1	1	0	1	0	0	0	0	0	0	0	3	3
5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1
5:15 PM	2	0	2	0	0	0	0	0	0	0	0	0	1	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	3	1	4	2	1	3	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

All Traffic Data Services

8 GIRARD BLVD & LOMAS BLVD AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	1	24	4	0	0	8	48	4	0	0	0	5	1	0	0	1	12	2	0	110	723
6:15 AM	0	1	33	1	0	0	10	54	2	0	0	4	8	2	0	0	3	15	5	0	138	881
6:30 AM	0	2	39	5	0	0	19	81	2	0	0	4	9	4	0	0	5	8	10	0	188	1,142
6:45 AM	0	8	57	7	0	0	33	106	4	0	0	11	7	10	0	0	5	23	16	0	287	1,446
7:00 AM	0	12	59	14	0	0	13	84	8	0	0	9	13	7	0	0	7	29	13	0	268	1,747
7:15 AM	0	3	86	28	0	0	28	116	15	0	0	20	30	6	0	1	7	46	13	0	399	1,995
7:30 AM	0	8	98	13	0	0	28	182	31	0	0	18	38	17	0	0	2	42	15	0	492	2,096
7:45 AM	0	11	94	21	0	0	37	248	21	0	0	32	36	10	0	0	9	49	20	0	588	2,086
8:00 AM	0	16	112	16	0	0	36	175	27	0	0	11	32	10	0	0	14	42	25	0	516	2,035
8:15 AM	0	14	102	15	0	0	23	178	24	0	0	28	39	12	0	0	10	39	16	0	500	0
8:30 AM	0	15	106	22	0	0	25	175	22	0	0	16	36	5	0	0	5	41	14	0	482	0
8:45 AM	1	32	141	25	0	0	24	151	34	0	0	12	47	10	0	0	5	40	15	0	537	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	49	399	64	0	0	121	774	102	0	0	89	143	48	0	0	33	168	72	0	2,062
Mediums	0	0	7	0	0	0	3	8	1	0	0	0	2	1	0	0	2	4	4	0	32
Total	0	49	406	65	0	0	124	783	103	0	0	89	145	49	0	0	35	172	76	0	2,096
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	7	0	0	9
Bicycles on Crosswalk			1					1					1					0			3
Heavy Vehicle Percentage			0.2%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.78					0.83					0.90					0.88			5.38
Peak Hour Factor (PHF)	0.25	0.60	0.82	0.70	0.00	0.00	0.87	0.79	0.79	0.00	0.00	0.70	0.82	0.72	0.00	0.25	0.68	0.91	0.76	0.00	5.38

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	21	4	0	0	8	46	4	0	0	0	5	1	0	0	1	12	2	0	105
6:15 AM	0	1	33	1	0	0	10	54	2	0	0	4	8	2	0	0	3	15	5	0	138
6:30 AM	0	2	39	4	0	0	19	80	1	0	0	4	9	4	0	0	4	8	10	0	184
6:45 AM	0	8	55	7	0	0	33	105	4	0	0	11	7	10	0	0	5	22	16	0	283
7:00 AM	0	11	58	14	0	0	13	83	8	0	0	9	13	7	0	0	7	29	13	0	265
7:15 AM	0	3	79	28	0	0	27	115	14	0	0	20	30	5	0	1	7	45	13	0	387
7:30 AM	0	8	97	13	0	0	27	179	31	0	0	18	37	17	0	0	2	40	14	0	483
7:45 AM	0	11	92	20	0	0	36	246	20	0	0	32	36	10	0	0	9	47	18	0	577
8:00 AM	0	16	109	16	0	0	35	173	27	0	0	11	31	10	0	0	12	42	24	0	506
8:15 AM	0	14	101	15	0	0	23	176	24	0	0	28	39	11	0	0	10	39	16	0	496
8:30 AM	0	15	103	22	0	0	25	172	22	0	0	16	34	5	0	0	5	41	14	0	474
8:45 AM	1	32	137	25	0	0	23	147	34	0	0	12	45	9	0	0	5	40	15	0	525
Mediums																					
6:00 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	3
6:45 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	4
7:00 AM	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	6	0	0	0	1	1	1	0	0	0	0	1	0	0	0	1	0	0	11
7:30 AM	0	0	1	0	0	0	1	3	0	0	0	0	1	0	0	0	0	2	1	0	9
7:45 AM	0	0	2	0	0	0	1	2	1	0	0	0	0	0	0	0	0	2	2	0	10
8:00 AM	0	0	3	0	0	0	1	2	0	0	0	0	1	0	0	0	2	0	1	0	10
8:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3
8:30 AM	0	0	3	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	8
8:45 AM	0	0	4	0	0	0	1	4	0	0	0	0	2	1	0	0	0	0	0	0	12
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	5

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	2	0	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:45 AM	1	2	3	0	0	0	0	2	2	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	1	1	0	1	1	2	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	0	0	0	0	2	2	0	0	0	0	0	0
6:45 AM	0	1	1	0	0	0	0	1	1	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	1	1	0	0	0
7:45 AM	0	0	0	2	0	2	0	1	1	3	0	3
8:00 AM	0	1	1	1	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	3	0	3	1	0	1	3	0	3
8:30 AM	1	2	3	0	0	0	0	1	1	0	0	0
8:45 AM	1	2	3	1	0	1	0	1	1	2	0	2

All Traffic Data Services

8 GIRARD BLVD & LOMAS BLVD Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	8	156	27	0	0	10	117	11	0	0	18	26	11	0	0	11	29	13	0	437	1,876
11:15 AM	2	13	158	31	0	0	27	129	16	0	0	16	24	19	0	0	13	30	14	0	492	1,956
11:30 AM	0	11	139	21	0	0	16	127	8	0	0	9	25	21	0	0	11	41	17	0	446	1,979
11:45 AM	1	12	168	26	0	0	23	124	8	0	0	23	43	19	0	0	16	32	6	0	501	2,061
12:00 PM	0	16	156	25	0	0	30	125	11	0	0	20	38	16	0	0	11	47	22	0	517	2,073
12:15 PM	2	12	183	31	0	0	22	137	10	0	0	17	21	20	0	0	12	37	11	0	515	2,059
12:30 PM	0	10	149	28	0	0	16	133	18	0	0	17	55	23	0	0	11	49	19	0	528	2,052
12:45 PM	0	14	153	17	0	0	21	135	13	0	0	17	35	18	0	0	14	51	25	0	513	1,982
1:00 PM	0	21	133	24	0	1	31	142	9	0	0	14	39	22	0	0	14	34	19	0	503	1,970
1:15 PM	1	7	162	23	0	0	15	143	12	0	0	18	29	21	0	0	14	50	13	0	508	0
1:30 PM	0	10	154	15	0	0	18	112	7	0	0	18	39	27	0	0	5	39	14	0	458	0
1:45 PM	0	17	142	29	0	0	34	139	7	0	0	18	32	16	0	0	9	39	19	0	501	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	2	51	635	99	0	0	88	519	52	0	0	70	146	77	0	0	47	180	75	0	2,041
Mediums	0	1	6	1	0	0	1	10	0	0	0	1	3	0	0	0	1	4	2	0	30
Total	2	52	641	101	0	0	89	530	52	0	0	71	149	77	0	0	48	184	77	0	2,073
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	2	0	0	7
Bicycles on Crosswalk			0					1					0					1			2
Heavy Vehicle Percentage			0.1%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.90					0.94					0.82					0.87			6.07
Peak Hour Factor (PHF)	0.38	0.68	0.90	0.89	0.00	0.25	0.72	0.97	0.72	0.00	0.00	0.84	0.72	0.81	0.00	0.00	0.95	0.90	0.77	0.00	6.07

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	8	151	27	0	0	9	110	10	0	0	17	26	11	0	0	11	27	13	0	420
11:15 AM	2	13	157	31	0	0	27	127	16	0	0	15	22	19	0	0	13	29	14	0	485
11:30 AM	0	11	135	20	0	0	14	126	8	0	0	9	25	21	0	0	11	41	17	0	438
11:45 AM	1	12	167	26	0	0	22	123	7	0	0	23	43	18	0	0	16	31	6	0	495
12:00 PM	0	16	154	23	0	0	29	122	11	0	0	20	37	16	0	0	11	47	22	0	508
12:15 PM	2	12	182	31	0	0	22	134	10	0	0	16	21	20	0	0	12	36	11	0	509
12:30 PM	0	10	148	28	0	0	16	129	18	0	0	17	54	23	0	0	11	48	19	0	521
12:45 PM	0	13	151	17	0	0	21	134	13	0	0	17	34	18	0	0	13	49	23	0	503
1:00 PM	0	21	130	24	0	1	30	138	9	0	0	13	39	22	0	0	14	34	18	0	493
1:15 PM	1	7	160	22	0	0	15	136	11	0	0	18	29	21	0	0	14	50	13	0	497
1:30 PM	0	10	146	13	0	0	18	109	6	0	0	17	39	26	0	0	5	37	14	0	440
1:45 PM	0	17	140	28	0	0	34	139	6	0	0	18	31	16	0	0	9	39	19	0	496
Mediums																					
11:00 AM	0	0	5	0	0	0	1	6	1	0	0	1	0	0	0	0	0	2	0	0	16
11:15 AM	0	0	1	0	0	0	0	2	0	0	0	1	2	0	0	0	0	1	0	0	7
11:30 AM	0	0	4	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8
11:45 AM	0	0	1	0	0	0	1	1	1	0	0	0	0	1	0	0	0	1	0	0	6
12:00 PM	0	0	2	1	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	7
12:15 PM	0	0	1	0	0	0	0	3	0	0	0	1	0	0	0	0	0	1	0	0	6
12:30 PM	0	0	1	0	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	7
12:45 PM	0	1	2	0	0	0	0	1	0	0	0	0	1	0	0	0	1	2	2	0	10
1:00 PM	0	0	3	0	0	0	1	4	0	0	0	1	0	0	0	0	0	0	1	0	10
1:15 PM	0	0	2	1	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	11
1:30 PM	0	0	7	2	0	0	0	3	1	0	0	1	0	1	0	0	0	2	0	0	17
1:45 PM	0	0	2	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	5
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	2	0	2	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	3	0	3
11:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	1	1	0	1	0	0	0
12:00 PM	1	0	1	0	2	2	1	0	1	1	1	2
12:15 PM	0	2	2	0	0	0	0	1	1	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	2	1	3	0	0	0	0	0	0	0	0	0
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	1	0	0	0	1	0	1	1	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

8 GIRARD BLVD & LOMAS BLVD PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	15	197	22	0	0	23	132	13	0	0	21	46	23	0	0	9	32	16	0	549	2,573
3:45 PM	0	22	189	34	0	0	25	121	6	0	0	21	45	35	0	0	17	56	19	0	590	2,794
4:00 PM	0	26	230	23	0	0	21	178	23	0	0	18	43	26	0	0	23	58	14	0	683	2,943
4:15 PM	0	30	198	28	0	0	35	175	33	0	0	22	56	31	0	0	32	69	42	0	751	3,053
4:30 PM	0	19	204	40	0	0	36	231	24	0	0	21	48	30	0	1	23	62	31	0	770	3,075
4:45 PM	0	22	198	23	0	0	27	212	15	0	0	13	64	34	0	0	16	82	33	0	739	3,036
5:00 PM	0	24	262	32	0	0	34	214	16	0	0	16	59	32	0	0	15	65	24	0	793	2,908
5:15 PM	0	39	232	36	0	0	36	168	15	0	0	18	67	35	0	0	24	88	15	0	773	2,632
5:30 PM	0	41	210	50	0	0	34	197	11	0	0	15	50	33	0	0	11	52	27	0	731	2,335
5:45 PM	0	14	145	30	0	0	50	165	15	0	0	17	39	31	0	0	17	67	21	0	611	0
6:00 PM	0	12	133	27	0	0	31	137	16	0	0	14	39	28	0	0	9	53	18	0	517	0
6:15 PM	0	13	112	23	0	0	33	119	7	0	0	21	26	27	0	0	15	63	17	0	476	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	104	889	131	0	0	132	814	70	0	0	67	236	131	0	1	78	297	102	0	3,052
Mediums	0	0	7	0	0	0	1	9	0	0	0	1	2	0	0	0	0	0	1	0	21
Total	0	104	896	131	0	0	133	825	70	0	0	68	238	131	0	1	78	297	103	0	3,075
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	7	0	0	13
Bicycles on Crosswalk			2					1					0					1			4
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.92					0.90					0.91					0.87			5.59
Peak Hour Factor (PHF)	0.00	0.77	0.86	0.74	0.00	0.00	0.77	0.90	0.72	0.00	0.00	0.93	0.90	0.96	0.00	0.25	0.74	0.84	0.77	0.00	5.59

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	15	194	22	0	0	22	130	13	0	0	20	45	23	0	0	9	32	16	0	541
3:45 PM	0	22	183	33	0	0	25	118	6	0	0	21	45	33	0	0	17	55	18	0	576
4:00 PM	0	26	229	23	0	0	21	172	23	0	0	18	43	26	0	0	23	58	14	0	676
4:15 PM	0	30	196	27	0	0	35	170	32	0	0	22	56	31	0	0	32	68	41	0	740
4:30 PM	0	19	201	40	0	0	36	226	24	0	0	20	48	30	0	1	23	62	30	0	760
4:45 PM	0	22	197	23	0	0	26	210	15	0	0	13	64	34	0	0	16	82	33	0	735
5:00 PM	0	24	260	32	0	0	34	213	16	0	0	16	57	32	0	0	15	65	24	0	788
5:15 PM	0	39	231	36	0	0	36	165	15	0	0	18	67	35	0	0	24	88	15	0	769
5:30 PM	0	41	207	50	0	0	33	193	11	0	0	15	49	33	0	0	11	50	27	0	720
5:45 PM	0	14	142	30	0	0	50	164	15	0	0	17	39	31	0	0	17	67	20	0	606
6:00 PM	0	12	133	27	0	0	30	134	16	0	0	14	39	28	0	0	9	53	18	0	513
6:15 PM	0	13	111	23	0	0	33	118	7	0	0	21	26	27	0	0	15	63	17	0	474
Mediums																					
3:30 PM	0	0	3	0	0	0	1	2	0	0	0	1	1	0	0	0	0	0	0	0	8
3:45 PM	0	0	6	1	0	0	0	3	0	0	0	0	0	2	0	0	0	1	1	0	14
4:00 PM	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7
4:15 PM	0	0	2	1	0	0	0	5	1	0	0	0	0	0	0	0	0	1	1	0	11
4:30 PM	0	0	3	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	1	0	10
4:45 PM	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	5
5:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	3	0	0	0	1	4	0	0	0	0	1	0	0	0	0	2	0	0	11
5:45 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	5
6:00 PM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	1	0	0	0	1	0	1
4:45 PM	1	1	2	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
3:45 PM	0	1	1	0	1	1	0	0	0	0	0	0
4:00 PM	13	1	14	0	1	1	0	0	0	13	0	13
4:15 PM	2	1	3	0	18	18	0	5	5	27	6	33
4:30 PM	0	0	0	0	1	1	1	0	1	0	0	0
4:45 PM	1	0	1	1	2	3	1	0	1	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	1	8	9	0	1	1	0	0	0	1	8	9
5:30 PM	1	0	1	0	0	0	2	1	3	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	1	1	0	0	0	0	0	0	1	0	1
6:15 PM	0	0	0	0	1	1	0	0	0	0	1	1

All Traffic Data Services

9 YALE BLVD & LOMAS BLVD AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	5	23	76	5	0	0	2	47	6	0	0	0	1	1	0	0	3	1	10	0	180	1,227
6:15 AM	5	34	103	7	0	0	2	63	11	0	0	0	0	0	0	0	3	3	11	0	242	1,435
6:30 AM	5	44	151	13	0	1	3	88	12	0	0	1	5	2	0	0	6	8	20	0	359	1,694
6:45 AM	2	56	199	12	0	2	7	107	26	0	0	5	2	4	0	0	7	5	12	0	446	1,949
7:00 AM	3	43	159	24	0	0	6	113	13	0	0	2	2	2	0	0	3	3	15	0	388	2,116
7:15 AM	4	49	200	18	0	1	8	142	23	0	0	0	3	6	0	0	7	6	34	0	501	2,298
7:30 AM	3	56	206	17	0	0	6	217	17	0	0	3	5	2	0	0	15	6	61	0	614	2,357
7:45 AM	1	48	207	9	0	1	13	257	31	0	0	3	6	3	0	0	4	5	25	0	613	2,322
8:00 AM	1	47	218	10	0	1	12	198	34	0	0	3	8	3	0	0	10	5	20	0	570	2,283
8:15 AM	3	56	207	18	0	1	5	198	22	0	0	6	7	5	0	0	4	9	19	0	560	0
8:30 AM	1	60	217	18	0	1	8	202	21	0	0	7	6	4	0	0	8	10	16	0	579	0
8:45 AM	5	42	238	17	0	1	8	177	30	0	0	9	2	5	0	0	5	7	28	0	574	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
Lights	8	203	809	54	0	3	36	841	103	0	0	11	19	13	0	0	33	15	119	0	2,267
Mediums	0	4	27	0	0	0	0	29	1	0	0	4	7	0	0	0	0	10	5	0	87
Total	8	207	838	54	0	3	36	870	104	0	0	15	26	13	0	0	33	25	125	0	2,357
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	6
Bicycles on Crosswalk			12					0					1					0			13
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.5%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.1%
Peak Hour Factor (PHF)			0.96					0.84					0.90					0.60			5.16
Peak Hour Factor (PHF)	0.85	0.88	0.92	0.74	0.00	0.50	0.75	0.85	0.79	0.00	0.00	0.69	0.84	0.85	0.00	0.00	0.60	0.78	0.57	0.00	5.16

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	5	22	56	5	0	0	2	40	5	0	0	0	1	1	0	0	1	1	10	0	149
6:15 AM	5	33	89	5	0	0	2	54	11	0	0	0	0	0	0	0	1	2	10	0	212
6:30 AM	5	43	142	13	0	1	3	83	12	0	0	1	2	2	0	0	6	6	18	0	337
6:45 AM	2	53	186	9	0	2	7	100	26	0	0	4	0	4	0	0	7	3	11	0	414
7:00 AM	3	42	150	23	0	0	6	104	12	0	0	2	0	2	0	0	3	1	13	0	361
7:15 AM	4	46	191	18	0	1	8	136	22	0	0	0	1	6	0	0	7	3	34	0	477
7:30 AM	3	56	200	17	0	0	6	210	16	0	0	2	3	2	0	0	15	4	57	0	591
7:45 AM	1	48	197	9	0	1	13	250	31	0	0	1	5	3	0	0	4	1	25	0	589
8:00 AM	1	46	211	10	0	1	12	190	34	0	0	2	6	3	0	0	10	3	20	0	549
8:15 AM	3	53	201	18	0	1	5	191	22	0	0	6	5	5	0	0	4	7	17	0	538
8:30 AM	1	59	212	18	0	1	8	194	21	0	0	7	4	4	0	0	8	8	16	0	561
8:45 AM	5	40	228	16	0	1	8	169	30	0	0	9	1	5	0	0	5	5	26	0	548
Mediums																					
6:00 AM	0	1	20	0	0	0	0	7	1	0	0	0	0	0	0	0	2	0	0	0	31
6:15 AM	0	0	13	2	0	0	0	9	0	0	0	0	0	0	0	0	2	1	1	0	28
6:30 AM	0	0	8	0	0	0	0	5	0	0	0	0	3	0	0	0	0	2	2	0	20
6:45 AM	0	2	13	3	0	0	0	7	0	0	0	1	2	0	0	0	0	2	1	0	31
7:00 AM	0	1	8	1	0	0	0	9	1	0	0	0	2	0	0	0	0	2	2	0	26
7:15 AM	0	3	9	0	0	0	0	6	1	0	0	0	2	0	0	0	0	3	0	0	24
7:30 AM	0	0	6	0	0	0	0	7	1	0	0	1	2	0	0	0	0	2	4	0	23
7:45 AM	0	0	9	0	0	0	0	7	0	0	0	2	1	0	0	0	0	4	0	0	23
8:00 AM	0	1	6	0	0	0	0	8	0	0	0	1	2	0	0	0	0	2	0	0	20
8:15 AM	0	3	6	0	0	0	0	7	0	0	0	0	2	0	0	0	0	2	1	0	21
8:30 AM	0	1	5	0	0	0	0	8	0	0	0	0	2	0	0	0	0	2	0	0	18
8:45 AM	0	2	9	1	0	0	0	8	0	0	0	0	1	0	0	0	0	2	2	0	25
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	2	2	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	2	2	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	2	0	2	0	0	0	0	0	0	0	0	0
7:15 AM	3	3	6	0	0	0	0	1	1	0	0	0
7:30 AM	1	3	4	0	0	0	0	0	0	0	0	0
7:45 AM	0	3	3	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:15 AM	1	3	4	0	0	0	0	1	1	0	0	0
8:30 AM	3	1	4	0	0	0	0	0	0	0	0	0
8:45 AM	4	1	5	0	0	0	0	1	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	1	1	0	0	0
6:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	1	0	0	0	0	1	1	0	0	0
6:45 AM	1	2	3	0	0	0	0	0	0	0	0	0
7:00 AM	3	2	5	0	0	0	1	0	1	0	0	0
7:15 AM	1	2	3	0	0	0	0	0	0	0	0	0
7:30 AM	3	2	5	0	0	0	0	0	0	0	0	0
7:45 AM	1	9	10	0	0	0	0	1	1	0	0	0
8:00 AM	3	1	4	0	0	0	1	0	1	0	0	0
8:15 AM	4	2	6	0	0	0	2	0	2	0	0	0
8:30 AM	7	3	10	0	0	0	0	0	0	0	0	0
8:45 AM	6	5	11	0	0	0	2	1	3	0	0	0

All Traffic Data Services

9 YALE BLVD & LOMAS BLVD Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	5	31	184	11	0	0	4	157	14	0	0	8	3	8	0	0	13	18	35	0	491	2,059
11:15 AM	7	29	192	17	0	0	6	160	16	0	0	5	2	8	0	0	15	12	37	0	506	2,146
11:30 AM	2	32	190	24	0	5	8	165	16	0	0	12	6	8	0	0	12	14	41	0	535	2,232
11:45 AM	4	37	217	11	0	2	6	146	17	0	0	12	8	4	0	0	22	4	37	0	527	2,275
12:00 PM	1	42	233	4	0	5	5	189	15	0	0	13	4	13	0	0	11	6	37	0	578	2,261
12:15 PM	5	53	219	16	0	2	9	170	24	0	0	11	10	7	0	0	21	8	37	0	592	2,211
12:30 PM	3	32	232	27	0	1	12	163	30	0	0	14	4	7	0	0	13	7	33	0	578	2,155
12:45 PM	4	39	199	19	0	1	6	156	17	0	0	9	4	7	0	0	19	4	29	0	513	2,084
1:00 PM	2	28	194	17	0	3	0	189	24	0	0	9	4	4	0	0	11	9	34	0	528	2,119
1:15 PM	4	40	216	20	0	2	0	171	19	0	0	6	10	1	0	0	14	5	28	0	536	0
1:30 PM	2	29	215	7	0	2	0	160	24	0	0	4	5	3	0	0	11	9	36	0	507	0
1:45 PM	3	37	203	9	0	0	0	184	19	0	0	13	7	15	0	0	11	7	40	0	548	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	4
Lights	13	162	846	63	0	9	32	644	82	0	0	43	15	31	0	0	64	17	133	0	2,154
Mediums	0	3	36	3	0	0	0	33	4	0	0	3	7	3	0	0	0	8	3	0	103
Total	13	166	883	66	0	9	32	678	86	0	0	47	22	34	0	0	64	25	136	0	2,261
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	1	0	0	8
Bicycles on Crosswalk			6					0					1					0			7
Heavy Vehicle Percentage			0.2%					0.1%					1.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.97					0.93					0.90					0.97			5.42
Peak Hour Factor (PHF)	0.64	0.78	0.97	0.77	0.00	0.70	0.67	0.93	0.79	0.00	0.00	0.89	0.70	0.65	0.00	0.00	0.76	0.67	0.93	0.00	5.42

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	5	30	177	10	0	0	4	148	13	0	0	7	0	7	0	0	12	14	35	0	462
11:15 AM	7	29	187	16	0	0	6	154	14	0	0	4	0	7	0	0	15	7	37	0	483
11:30 AM	2	32	181	23	0	5	8	159	15	0	0	10	4	7	0	0	10	11	41	0	508
11:45 AM	4	37	209	11	0	2	6	142	17	0	0	10	7	3	0	0	22	2	36	0	508
12:00 PM	1	41	219	4	0	5	5	179	14	0	0	12	3	12	0	0	11	5	36	0	547
12:15 PM	5	52	213	15	0	2	9	160	24	0	0	11	8	7	0	0	21	6	35	0	568
12:30 PM	3	32	224	26	0	1	12	156	29	0	0	13	2	6	0	0	13	4	33	0	554
12:45 PM	4	37	190	18	0	1	6	149	15	0	0	7	2	6	0	0	19	2	29	0	485
1:00 PM	2	28	185	17	0	3	0	185	21	0	0	9	2	4	0	0	11	7	33	0	507
1:15 PM	4	40	210	18	0	2	0	165	18	0	0	6	8	1	0	0	14	3	27	0	516
1:30 PM	2	29	208	6	0	2	0	154	24	0	0	4	3	3	0	0	9	7	36	0	487
1:45 PM	3	35	195	9	0	0	0	179	18	0	0	11	5	14	0	0	11	5	39	0	524
Mediums																					
11:00 AM	0	1	7	1	0	0	0	7	1	0	0	1	2	1	0	0	1	4	0	0	26
11:15 AM	0	0	5	1	0	0	0	6	2	0	0	1	2	1	0	0	0	5	0	0	23
11:30 AM	0	0	9	1	0	0	0	6	1	0	0	2	2	1	0	0	2	3	0	0	27
11:45 AM	0	0	8	0	0	0	0	3	0	0	0	1	1	1	0	0	0	2	1	0	17
12:00 PM	0	1	13	0	0	0	0	9	1	0	0	1	1	1	0	0	0	1	1	0	29
12:15 PM	0	1	6	1	0	0	0	10	0	0	0	0	2	0	0	0	0	2	2	0	24
12:30 PM	0	0	8	1	0	0	0	7	1	0	0	1	2	1	0	0	0	3	0	0	24
12:45 PM	0	1	9	1	0	0	0	7	2	0	0	1	2	1	0	0	0	2	0	0	26
1:00 PM	0	0	9	0	0	0	0	4	3	0	0	0	2	0	0	0	0	2	1	0	21
1:15 PM	0	0	6	2	0	0	0	6	1	0	0	0	2	0	0	0	0	2	1	0	20
1:30 PM	0	0	6	1	0	0	0	6	0	0	0	0	2	0	0	0	2	2	0	0	19
1:45 PM	0	2	8	0	0	0	0	5	1	0	0	1	2	1	0	0	0	2	1	0	23
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:15 AM	2	0	2	0	0	0	1	0	1	0	0	0
11:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:45 AM	2	0	2	0	0	0	0	0	0	0	0	0
12:00 PM	2	0	2	0	0	0	0	0	0	0	0	0
12:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:45 PM	2	0	2	0	0	0	1	0	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	1	0	1	0	0	0	0	1	1	0	0	0
1:45 PM	2	0	2	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	6	2	8	0	0	0	0	0	0	0	0	0
11:15 AM	3	5	8	2	0	2	1	2	3	0	0	0
11:30 AM	5	3	8	0	0	0	2	2	4	0	0	0
11:45 AM	7	7	14	0	0	0	0	0	0	0	0	0
12:00 PM	12	2	14	0	0	0	0	4	4	0	0	0
12:15 PM	7	6	13	0	0	0	0	1	1	0	0	0
12:30 PM	2	17	19	0	0	0	4	1	5	0	0	0
12:45 PM	4	8	12	0	0	0	1	0	1	0	0	0
1:00 PM	1	3	4	0	0	0	1	1	2	0	0	0
1:15 PM	11	2	13	0	0	0	2	0	2	0	0	0
1:30 PM	1	1	2	0	0	0	0	1	1	0	0	0
1:45 PM	4	3	7	0	0	0	0	0	0	0	0	0

All Traffic Data Services

9 YALE BLVD & LOMAS BLVD PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	1	22	245	10	0	3	7	186	16	0	1	14	3	9	0	0	17	2	46	0	582	2,644
3:45 PM	3	17	264	24	0	0	8	205	18	0	0	4	9	9	0	0	24	7	51	0	643	2,814
4:00 PM	2	28	305	7	0	3	11	219	31	0	0	7	13	10	0	0	22	6	46	0	710	2,902
4:15 PM	2	26	289	10	0	1	7	283	6	0	0	12	5	9	0	0	16	3	40	0	709	2,880
4:30 PM	1	18	253	17	0	0	10	313	13	0	0	18	7	10	0	0	21	7	64	0	752	2,913
4:45 PM	2	25	263	14	0	1	12	282	19	0	0	15	2	18	0	2	22	3	51	0	731	2,874
5:00 PM	1	24	276	16	0	0	10	242	21	0	0	21	7	9	0	2	16	5	38	0	688	2,664
5:15 PM	1	31	282	12	0	0	11	260	20	0	0	11	6	19	0	0	30	7	52	0	742	2,469
5:30 PM	2	32	288	15	0	0	4	258	18	0	0	11	3	11	0	0	18	6	47	0	713	2,175
5:45 PM	3	24	201	10	0	1	5	214	17	0	0	3	4	1	0	0	9	4	25	0	521	0
6:00 PM	7	31	184	13	0	0	5	183	6	0	1	4	2	11	0	0	15	3	28	0	493	0
6:15 PM	2	36	157	13	0	2	3	169	15	0	0	4	2	5	0	0	8	2	30	0	448	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	5	96	1,053	49	0	1	42	1,069	71	0	0	65	14	56	0	4	85	14	204	0	2,828
Mediums	0	2	21	10	0	0	1	26	2	0	0	0	8	0	0	0	4	8	1	0	83
Total	5	98	1,074	59	0	1	43	1,097	73	0	0	65	22	56	0	4	89	22	205	0	2,913
Bicycles on Road	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	7	0	0	11
Bicycles on Crosswalk			22					0					0					0			22
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.91					0.97					0.87			5.90
Peak Hour Factor (PHF)	0.50	0.85	0.91	0.87	0.00	0.58	0.90	0.89	0.93	0.00	0.25	0.79	0.65	0.75	0.00	0.50	0.74	0.82	0.80	0.00	5.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	1	22	239	8	0	3	7	181	15	0	1	14	0	9	0	0	17	0	45	0	562
3:45 PM	3	17	256	21	0	0	8	192	18	0	0	4	7	9	0	0	24	5	51	0	615
4:00 PM	2	28	298	5	0	3	10	213	29	0	0	7	6	10	0	0	22	4	45	0	682
4:15 PM	2	26	283	9	0	1	6	275	6	0	0	11	3	8	0	0	16	1	40	0	687
4:30 PM	1	18	247	11	0	0	10	303	12	0	0	18	4	10	0	0	21	5	64	0	724
4:45 PM	2	25	259	12	0	1	12	275	19	0	0	15	0	18	0	2	20	1	50	0	711
5:00 PM	1	23	270	15	0	0	9	237	20	0	0	21	6	9	0	2	16	3	38	0	670
5:15 PM	1	30	277	11	0	0	11	254	20	0	0	11	4	19	0	0	28	5	52	0	723
5:30 PM	2	32	282	13	0	0	4	250	18	0	0	10	1	10	0	0	17	4	47	0	690
5:45 PM	3	24	196	9	0	1	5	210	17	0	0	3	1	1	0	0	8	2	24	0	504
6:00 PM	7	31	178	12	0	0	5	178	6	0	1	4	1	11	0	0	15	2	28	0	479
6:15 PM	2	36	152	10	0	2	3	163	15	0	0	4	0	5	0	0	8	1	30	0	431
Mediums																					
3:30 PM	0	0	6	2	0	0	0	5	1	0	0	0	3	0	0	0	0	2	1	0	20
3:45 PM	0	0	8	3	0	0	0	12	0	0	0	0	2	0	0	0	0	2	0	0	27
4:00 PM	0	0	7	2	0	0	1	6	2	0	0	0	6	0	0	0	0	2	1	0	27
4:15 PM	0	0	6	1	0	0	1	8	0	0	0	1	2	1	0	0	0	2	0	0	22
4:30 PM	0	0	6	6	0	0	0	10	1	0	0	0	3	0	0	0	0	2	0	0	28
4:45 PM	0	0	4	2	0	0	0	7	0	0	0	0	2	0	0	0	2	2	1	0	20
5:00 PM	0	1	6	1	0	0	1	5	1	0	0	0	1	0	0	0	0	2	0	0	18
5:15 PM	0	1	5	1	0	0	0	4	0	0	0	0	2	0	0	0	2	2	0	0	17
5:30 PM	0	0	6	2	0	0	0	8	0	0	0	1	2	1	0	0	1	2	0	0	23
5:45 PM	0	0	5	1	0	0	0	4	0	0	0	0	3	0	0	0	1	2	1	0	17
6:00 PM	0	0	6	1	0	0	0	5	0	0	0	0	1	0	0	0	0	1	0	0	14
6:15 PM	0	0	5	3	0	0	0	6	0	0	0	0	2	0	0	0	0	1	0	0	17
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	3	0	3	0	0	0	0	0	0	0	0	0
4:00 PM	3	0	3	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	4	3	7	0	0	0	0	0	0	0	0	0
4:45 PM	5	1	6	0	0	0	0	0	0	0	0	0
5:00 PM	2	3	5	0	0	0	0	0	0	0	0	0
5:15 PM	3	1	4	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	2	2	4	0	0	0	0	0	0	0	0	0
6:00 PM	2	0	2	0	0	0	0	0	0	0	0	0
6:15 PM	2	1	3	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	2	5	7	0	0	0	0	0	0	1	0	1
3:45 PM	6	6	12	1	0	1	0	0	0	0	0	0
4:00 PM	5	3	8	0	0	0	0	0	0	0	0	0
4:15 PM	5	2	7	0	0	0	0	0	0	0	0	0
4:30 PM	2	3	5	0	0	0	0	0	0	0	0	0
4:45 PM	5	2	7	0	0	0	0	0	0	0	0	0
5:00 PM	7	5	12	0	0	0	0	0	0	0	0	0
5:15 PM	2	8	10	0	0	0	0	0	0	0	0	0
5:30 PM	3	2	5	0	0	0	0	0	0	0	0	0
5:45 PM	4	0	4	0	0	0	0	0	0	0	0	0
6:00 PM	1	1	2	0	0	0	0	0	0	0	0	0
6:15 PM	5	3	8	0	0	0	0	0	0	0	0	0

All Traffic Data Services

10 STANFORD DR & LOMAS BLVD AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	1	50	29	0	2	5	48	2	0	0	4	0	3	0	0	2	0	2	0	148	1,039
6:15 AM	0	2	65	37	0	1	8	73	0	0	0	2	0	8	0	0	0	0	1	0	197	1,231
6:30 AM	0	2	125	37	0	1	12	101	1	0	0	4	0	11	0	0	4	0	0	0	298	1,444
6:45 AM	0	2	151	63	0	4	10	131	3	0	0	10	0	11	0	0	4	0	7	0	396	1,660
7:00 AM	0	1	143	33	0	6	10	114	2	0	0	18	0	9	0	0	4	0	0	0	340	1,810
7:15 AM	0	1	144	64	0	4	11	151	2	0	0	21	0	9	0	0	0	1	2	0	410	1,973
7:30 AM	0	0	163	57	0	5	19	221	1	0	0	40	0	7	0	0	0	0	1	0	514	2,033
7:45 AM	0	0	153	59	0	6	16	282	1	0	0	14	0	14	0	0	0	0	1	0	546	1,994
8:00 AM	0	1	173	54	0	5	18	221	1	0	0	17	0	11	0	0	2	0	0	0	503	1,944
8:15 AM	0	1	162	51	0	0	14	216	1	0	0	9	0	11	0	0	2	0	3	0	470	0
8:30 AM	0	0	169	55	0	4	10	212	1	0	0	12	0	11	0	0	0	0	1	0	475	0
8:45 AM	0	1	222	25	0	2	9	217	0	0	0	7	0	12	0	0	0	0	1	0	496	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	0	2	627	216	0	16	65	910	4	0	0	80	0	41	0	0	4	0	5	0	1,970
Mediums	0	0	22	5	0	0	1	30	0	0	0	0	0	2	0	0	0	0	0	0	60
Total	0	2	651	221	0	16	67	940	4	0	0	80	0	43	0	0	4	0	5	0	2,033
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Bicycles on Crosswalk			1					13					0					1			15
Heavy Vehicle Percentage			0.2%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.92					0.84					0.71					0.50			5.80
Peak Hour Factor (PHF)	0.00	0.88	0.82	0.91	0.00	0.88	0.88	0.83	0.67	0.00	0.00	0.58	0.00	0.84	0.00	0.00	0.75	0.25	0.36	0.00	5.80

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	1	30	28	0	2	5	42	2	0	0	3	0	2	0	0	2	0	2	0	119
6:15 AM	0	2	48	37	0	1	8	65	0	0	0	2	0	8	0	0	0	0	1	0	172
6:30 AM	0	2	116	37	0	1	12	95	1	0	0	4	0	9	0	0	4	0	0	0	281
6:45 AM	0	2	140	62	0	4	10	124	3	0	0	10	0	11	0	0	4	0	7	0	377
7:00 AM	0	0	135	33	0	6	10	105	2	0	0	18	0	9	0	0	4	0	0	0	322
7:15 AM	0	1	136	64	0	4	11	145	2	0	0	21	0	8	0	0	0	1	2	0	395
7:30 AM	0	0	157	57	0	5	19	213	1	0	0	40	0	7	0	0	0	0	1	0	500
7:45 AM	0	0	145	56	0	6	16	275	1	0	0	14	0	14	0	0	0	0	1	0	528
8:00 AM	0	1	167	54	0	5	18	213	1	0	0	17	0	10	0	0	2	0	0	0	488
8:15 AM	0	1	158	49	0	0	12	209	1	0	0	9	0	10	0	0	2	0	3	0	454
8:30 AM	0	0	164	55	0	4	10	204	1	0	0	12	0	11	0	0	0	0	1	0	462
8:45 AM	0	1	212	25	0	2	9	210	0	0	0	6	0	12	0	0	0	0	1	0	478
Mediums																					
6:00 AM	0	0	20	1	0	0	0	6	0	0	0	1	0	1	0	0	0	0	0	0	29
6:15 AM	0	0	16	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	24
6:30 AM	0	0	8	0	0	0	0	6	0	0	0	0	0	2	0	0	0	0	0	0	16
6:45 AM	0	0	11	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	19
7:00 AM	0	1	7	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	17
7:15 AM	0	0	8	0	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	15
7:30 AM	0	0	6	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	14
7:45 AM	0	0	7	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	17
8:00 AM	0	0	5	0	0	0	0	8	0	0	0	0	0	1	0	0	0	0	0	0	14
8:15 AM	0	0	4	2	0	0	1	7	0	0	0	0	0	1	0	0	0	0	0	0	15
8:30 AM	0	0	5	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	13
8:45 AM	0	0	9	0	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	17
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	1	2	0	0	0	0	0	0
6:45 AM	0	1	1	2	3	5	0	0	0	0	0	0
7:00 AM	0	0	0	4	5	9	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	2	4	0	0	0	0	0	0
7:45 AM	0	1	1	1	1	2	0	0	0	0	1	1
8:00 AM	0	0	0	5	2	7	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	6	6	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	3	2	5	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	2	3	0	1	1	1	0	1
6:15 AM	0	1	1	1	1	2	0	0	0	0	0	0
6:30 AM	0	0	0	6	2	8	1	0	1	1	0	1
6:45 AM	0	1	1	14	3	17	1	0	1	1	0	1
7:00 AM	0	0	0	3	6	9	1	0	1	2	0	2
7:15 AM	0	0	0	5	13	18	1	1	2	0	0	0
7:30 AM	1	1	2	6	2	8	1	0	1	0	0	0
7:45 AM	0	2	2	4	1	5	0	0	0	0	1	1
8:00 AM	0	0	0	7	2	9	2	1	3	2	0	2
8:15 AM	0	0	0	6	4	10	4	1	5	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	2
8:45 AM	1	3	4	12	5	17	5	0	5	0	0	0

All Traffic Data Services

10 STANFORD DR & LOMAS BLVD Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

Time	LOMAS BLVD Eastbound					LOMAS BLVD Westbound					STANFORD DR Northbound					STANFORD DR Southbound					Total	Rolling Hour
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR		
11:00 AM	1	2	201	17	0	1	8	161	0	0	0	10	0	7	0	0	0	0	3	0	411	1,726
11:15 AM	0	3	193	17	0	3	11	172	1	0	0	15	0	7	0	0	2	0	0	0	424	1,783
11:30 AM	2	4	200	21	0	2	8	179	1	0	0	17	0	10	0	0	2	0	2	0	448	1,849
11:45 AM	1	5	220	17	0	4	13	156	0	0	0	15	0	10	0	0	0	0	2	0	443	1,886
12:00 PM	0	1	214	21	0	0	11	185	1	0	0	19	0	15	0	0	1	0	0	0	468	1,890
12:15 PM	1	1	242	18	0	4	11	171	4	0	0	21	0	11	0	0	2	0	4	0	490	1,841
12:30 PM	0	6	216	35	0	1	12	183	3	0	0	18	0	8	0	0	2	0	1	0	485	1,802
12:45 PM	0	1	196	28	0	2	11	177	1	0	0	17	0	10	0	0	2	0	2	0	447	1,727
1:00 PM	0	1	173	30	0	5	7	185	1	0	0	12	0	4	0	0	0	0	1	0	419	1,758
1:15 PM	0	4	211	18	0	2	12	178	2	0	0	16	0	5	0	0	1	0	2	0	451	0
1:30 PM	0	3	187	23	0	2	8	159	1	0	0	17	0	7	0	0	0	0	3	0	410	0
1:45 PM	0	1	197	50	0	2	15	189	0	0	0	15	0	7	0	0	0	0	2	0	478	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	1	9	839	95	0	7	44	680	9	0	0	74	0	44	0	0	7	0	7	0	1,816
Mediums	0	0	28	7	0	0	1	35	0	0	0	1	0	0	0	0	0	0	0	0	72
Total	1	9	868	102	0	7	45	716	9	0	0	75	0	44	0	0	7	0	7	0	1,890
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
Bicycles on Crosswalk			1					13					1					0			15
Heavy Vehicle Percentage			0.1%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.98					0.88					0.58			6.54
Peak Hour Factor (PHF)	0.50	0.70	0.92	0.61	0.00	0.60	0.90	0.98	0.56	0.00	0.00	0.89	0.00	0.77	0.00	0.00	0.88	0.00	0.50	0.00	6.54

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	1	2	192	17	0	1	7	150	0	0	0	10	0	7	0	0	0	0	3	0	390
11:15 AM	0	3	188	17	0	3	11	164	1	0	0	15	0	7	0	0	2	0	0	0	411
11:30 AM	2	4	191	18	0	2	8	171	1	0	0	17	0	10	0	0	2	0	2	0	428
11:45 AM	1	5	213	17	0	4	13	149	0	0	0	15	0	10	0	0	0	0	2	0	429
12:00 PM	0	1	205	17	0	0	11	175	1	0	0	18	0	15	0	0	1	0	0	0	444
12:15 PM	1	1	236	18	0	4	10	162	4	0	0	21	0	11	0	0	2	0	4	0	474
12:30 PM	0	6	210	33	0	1	12	175	3	0	0	18	0	8	0	0	2	0	1	0	469
12:45 PM	0	1	188	27	0	2	11	168	1	0	0	17	0	10	0	0	2	0	2	0	429
1:00 PM	0	1	167	30	0	5	7	179	1	0	0	12	0	4	0	0	0	0	1	0	407
1:15 PM	0	4	206	18	0	2	12	171	2	0	0	16	0	5	0	0	1	0	2	0	439
1:30 PM	0	3	178	23	0	2	8	154	1	0	0	17	0	7	0	0	0	0	3	0	396
1:45 PM	0	1	191	48	0	2	15	184	0	0	0	15	0	7	0	0	0	0	2	0	465
Mediums																					
11:00 AM	0	0	9	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	19
11:15 AM	0	0	5	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	13
11:30 AM	0	0	9	3	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	20
11:45 AM	0	0	7	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	13
12:00 PM	0	0	8	4	0	0	0	9	0	0	0	1	0	0	0	0	0	0	0	0	22
12:15 PM	0	0	6	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	16
12:30 PM	0	0	6	2	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	16
12:45 PM	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	18
1:00 PM	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	12
1:15 PM	0	0	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	12
1:30 PM	0	0	8	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	13
1:45 PM	0	0	6	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	13
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	2	3	0	0	0	0	0	0
11:15 AM	0	0	0	3	2	5	1	0	1	1	0	1
11:30 AM	1	0	1	0	2	2	0	0	0	0	0	0
11:45 AM	0	0	0	1	1	2	0	0	0	0	0	0
12:00 PM	0	0	0	3	1	4	0	0	0	0	0	0
12:15 PM	1	0	1	1	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	3	1	4	0	0	0	0	0	0
12:45 PM	0	0	0	3	1	4	1	0	1	0	0	0
1:00 PM	0	0	0	2	2	4	0	0	0	0	0	0
1:15 PM	0	0	0	3	3	6	0	0	0	0	0	0
1:30 PM	0	0	0	1	2	3	0	0	0	0	0	0
1:45 PM	0	0	0	2	1	3	0	0	0	0	0	0

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	2	3	1	2	3	1	0	1	1	0	1
11:15 AM	4	2	6	3	3	6	2	1	3	0	2	2
11:30 AM	0	2	2	5	8	13	0	1	1	2	1	3
11:45 AM	1	4	5	2	6	8	1	2	3	1	2	3
12:00 PM	3	0	3	4	5	9	0	4	4	0	3	3
12:15 PM	2	0	2	0	4	4	0	0	0	0	0	0
12:30 PM	3	0	3	3	5	8	4	0	4	0	3	3
12:45 PM	3	4	7	4	2	6	4	1	5	2	0	2
1:00 PM	2	0	2	1	3	4	1	0	1	2	0	2
1:15 PM	3	1	4	3	8	11	0	0	0	4	1	5
1:30 PM	1	0	1	4	2	6	2	0	2	1	0	1
1:45 PM	2	0	2	6	4	10	0	0	0	0	0	0

All Traffic Data Services

10 STANFORD DR & LOMAS BLVD PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

Time	LOMAS BLVD Eastbound					LOMAS BLVD Westbound					STANFORD DR Northbound					STANFORD DR Southbound					Total	Rolling Hour
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR		
3:30 PM	2	1	236	19	0	2	6	171	2	0	0	34	0	17	0	0	0	0	2	0	492	2,305
3:45 PM	0	1	257	36	0	3	13	174	0	0	0	39	0	14	0	0	0	0	0	0	537	2,460
4:00 PM	0	3	304	22	0	0	12	223	1	0	0	30	0	16	0	0	0	0	2	0	613	2,583
4:15 PM	0	1	284	29	0	3	15	282	0	0	0	30	0	16	0	0	0	0	3	0	663	2,609
4:30 PM	0	1	245	27	0	2	16	308	1	0	0	36	0	9	0	0	0	0	2	0	647	2,593
4:45 PM	1	1	280	40	0	10	11	265	2	0	0	28	0	21	0	0	0	0	1	0	660	2,601
5:00 PM	1	0	275	30	0	5	18	239	1	0	0	44	0	26	0	0	0	0	0	0	639	2,407
5:15 PM	3	2	298	36	0	1	9	230	0	0	0	40	0	26	0	0	0	0	2	0	647	2,202
5:30 PM	0	0	283	44	0	1	20	247	1	0	0	36	0	23	0	0	0	0	0	0	655	1,927
5:45 PM	0	1	174	30	0	0	13	196	4	0	0	31	0	13	0	0	0	0	4	0	466	0
6:00 PM	3	1	190	30	0	0	8	176	2	0	0	13	0	9	0	0	0	0	2	0	434	0
6:15 PM	1	2	132	29	0	0	8	175	0	0	0	15	0	8	0	0	0	0	2	0	372	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	
Articulated Trucks	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	5	4	1,078	129	0	18	54	1,015	4	0	0	148	0	82	0	0	0	0	5	0	2,542
Mediums	0	0	20	4	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	49
Total	5	4	1,098	133	0	18	54	1,042	4	0	0	148	0	82	0	0	0	0	5	0	2,593
Bicycles on Road	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			3					12					0					0			15
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.90					0.87					0.50			6.72
Peak Hour Factor (PHF)	0.50	0.50	0.95	0.85	0.00	0.50	0.75	0.89	0.44	0.00	0.00	0.86	0.00	0.92	0.00	0.00	0.00	0.00	0.50	0.00	6.72

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	2	1	231	18	0	2	6	166	2	0	0	34	0	17	0	0	0	0	2	0	481
3:45 PM	0	1	251	34	0	3	13	163	0	0	0	39	0	14	0	0	0	0	0	0	518
4:00 PM	0	3	296	22	0	0	12	214	1	0	0	30	0	15	0	0	0	0	2	0	595
4:15 PM	0	1	278	29	0	3	15	271	0	0	0	30	0	16	0	0	0	0	3	0	646
4:30 PM	0	1	240	27	0	2	16	298	1	0	0	36	0	9	0	0	0	0	2	0	632
4:45 PM	1	1	276	38	0	10	11	260	2	0	0	28	0	21	0	0	0	0	1	0	649
5:00 PM	1	0	269	30	0	5	18	233	1	0	0	44	0	26	0	0	0	0	0	0	627
5:15 PM	3	2	293	34	0	1	9	224	0	0	0	40	0	26	0	0	0	0	2	0	634
5:30 PM	0	0	276	43	0	1	20	239	1	0	0	36	0	23	0	0	0	0	0	0	639
5:45 PM	0	1	170	28	0	0	13	192	4	0	0	31	0	13	0	0	0	0	4	0	456
6:00 PM	3	1	186	28	0	0	8	171	2	0	0	13	0	9	0	0	0	0	2	0	423
6:15 PM	1	2	129	28	0	0	8	169	0	0	0	15	0	8	0	0	0	0	2	0	362
Mediums																					
3:30 PM	0	0	5	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	11
3:45 PM	0	0	6	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	18
4:00 PM	0	0	8	0	0	0	0	9	0	0	0	0	0	1	0	0	0	0	0	0	18
4:15 PM	0	0	6	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	17
4:30 PM	0	0	5	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	15
4:45 PM	0	0	4	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	11
5:00 PM	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	12
5:15 PM	0	0	5	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11
5:30 PM	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	16
5:45 PM	0	0	4	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10
6:00 PM	0	0	4	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	11
6:15 PM	0	0	3	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	3	2	5	0	0	0	0	0	0
4:00 PM	0	0	0	1	5	6	0	0	0	0	0	0
4:15 PM	0	0	0	0	4	4	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:45 PM	1	0	1	1	4	5	0	0	0	0	0	0
5:00 PM	2	0	2	3	1	4	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	2	0	0	0	0	0	0
5:30 PM	0	0	0	1	5	6	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
6:00 PM	1	0	1	1	1	2	0	0	0	0	0	0
6:15 PM	0	0	0	0	1	1	0	0	0	0	0	0

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	6	8	14	0	0	0	0	0	0
3:45 PM	3	1	4	4	9	13	4	0	4	1	0	1
4:00 PM	0	1	1	2	4	6	0	2	2	2	0	2
4:15 PM	2	0	2	4	5	9	1	1	2	0	0	0
4:30 PM	1	0	1	3	3	6	0	2	2	1	0	1
4:45 PM	2	0	2	6	5	11	3	1	4	0	1	1
5:00 PM	1	1	2	2	4	6	0	1	1	1	0	1
5:15 PM	1	0	1	1	2	3	0	0	0	0	2	2
5:30 PM	2	0	2	1	2	3	1	2	3	2	1	3
5:45 PM	1	0	1	2	5	7	0	1	1	1	0	1
6:00 PM	0	2	2	2	6	8	0	0	0	0	0	0
6:15 PM	0	0	0	3	4	7	2	0	2	0	0	0

All Traffic Data Services

11 WASHINGTON ST & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	17	0	0	0	1	27	0	0	0	1	5	3	0	0	3	4	1	0	62	356
6:15 AM	0	1	25	2	0	3	3	30	0	0	0	0	8	1	0	0	5	4	2	0	84	402
6:30 AM	0	1	27	0	0	0	1	42	1	0	0	0	3	2	0	0	3	7	1	0	88	491
6:45 AM	0	0	33	1	0	2	1	44	3	0	0	1	18	1	0	0	1	17	0	0	122	616
7:00 AM	0	2	27	5	0	0	1	36	0	0	0	1	14	4	0	0	0	18	0	0	108	694
7:15 AM	0	1	46	3	0	0	1	51	0	0	0	0	32	0	0	0	1	35	3	0	173	792
7:30 AM	0	11	51	3	0	1	4	50	2	0	0	3	36	3	0	0	3	42	4	0	213	825
7:45 AM	0	5	42	3	0	0	5	59	0	0	0	3	33	4	0	0	4	41	1	0	200	837
8:00 AM	0	3	56	4	0	0	3	53	2	0	0	1	34	1	0	0	6	38	5	0	206	873
8:15 AM	0	5	62	4	0	1	3	51	3	0	0	5	37	2	0	0	5	24	4	0	206	0
8:30 AM	1	2	52	1	0	1	4	56	2	0	0	8	44	5	0	0	3	43	3	0	225	0
8:45 AM	0	4	54	1	0	2	1	70	5	0	0	6	41	5	0	0	4	40	3	0	236	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	3
Lights	1	14	212	10	0	4	10	213	12	0	0	18	153	13	0	0	17	143	15	0	835
Mediums	0	0	12	0	0	0	1	15	0	0	0	2	3	0	0	0	0	2	0	0	35
Total	1	14	224	10	0	4	11	230	12	0	0	20	156	13	0	0	18	145	15	0	873
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.8%					0.0%					0.6%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.88					0.82					0.83					0.93			0.92
Peak Hour Factor (PHF)	0.25	0.55	0.90	0.70	0.00	0.42	0.75	0.82	0.60	0.00	0.00	0.63	0.89	0.65	0.00	0.00	0.75	0.93	0.75	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	14	0	0	0	1	26	0	0	0	1	5	3	0	0	3	4	1	0	58
6:15 AM	0	1	23	2	0	3	3	25	0	0	0	0	8	1	0	0	5	4	1	0	76
6:30 AM	0	1	22	0	0	0	1	38	1	0	0	0	3	2	0	0	3	7	1	0	79
6:45 AM	0	0	30	1	0	2	1	39	3	0	0	1	18	1	0	0	1	17	0	0	114
7:00 AM	0	2	26	5	0	0	1	33	0	0	0	1	14	4	0	0	0	18	0	0	104
7:15 AM	0	1	41	2	0	0	1	45	0	0	0	0	32	0	0	0	1	35	3	0	161
7:30 AM	0	11	48	3	0	1	3	47	2	0	0	3	36	3	0	0	3	42	4	0	206
7:45 AM	0	5	39	3	0	0	5	57	0	0	0	3	33	4	0	0	4	41	1	0	195
8:00 AM	0	3	52	4	0	0	3	47	2	0	0	1	32	1	0	0	6	37	5	0	193
8:15 AM	0	5	58	4	0	1	3	48	3	0	0	5	37	2	0	0	5	24	4	0	199
8:30 AM	1	2	51	1	0	1	4	52	2	0	0	7	43	5	0	0	2	42	3	0	216
8:45 AM	0	4	51	1	0	2	0	66	5	0	0	5	41	5	0	0	4	40	3	0	227
Mediums																					
6:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	8
6:30 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
6:45 AM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
7:00 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	4	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
7:30 AM	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	4	0	0	0	0	6	0	0	0	0	2	0	0	0	0	1	0	0	13
8:15 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
8:30 AM	0	0	1	0	0	0	0	2	0	0	0	1	1	0	0	0	0	1	0	0	6
8:45 AM	0	0	3	0	0	0	1	4	0	0	0	1	0	0	0	0	0	0	0	0	9
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	0	0	0	1	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:45 AM	1	1	2	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	1	1	2	2	0	2
7:15 AM	1	1	2	0	0	0	0	0	0	0	3	3
7:30 AM	1	0	1	0	0	0	1	0	1	1	0	1
7:45 AM	1	0	1	0	0	0	0	0	0	1	1	2
8:00 AM	2	0	2	0	0	0	0	0	0	3	1	4
8:15 AM	5	0	5	0	0	0	0	1	1	0	0	0
8:30 AM	1	3	4	0	0	0	0	0	0	1	1	2
8:45 AM	1	0	1	0	0	0	0	0	0	0	0	0

All Traffic Data Services

11 WASHINGTON ST & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:15 AM - 12:15 PM
Peak 15-Minutes
11:30 AM - 11:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	3	2	68	2	0	2	9	98	3	0	0	7	42	8	0	0	3	39	10	0	296	1,406
11:15 AM	3	2	86	2	0	2	7	135	4	0	0	6	43	3	0	0	4	44	7	0	348	1,460
11:30 AM	0	4	91	3	0	4	10	151	5	0	0	10	50	6	0	0	5	40	12	0	391	1,450
11:45 AM	1	7	85	6	0	2	11	137	7	0	0	4	44	5	0	0	8	47	7	0	371	1,368
12:00 PM	2	4	104	5	0	2	9	109	3	0	0	6	52	6	0	0	6	35	7	0	350	1,315
12:15 PM	2	8	104	3	0	4	3	104	5	0	0	7	36	5	0	0	9	41	7	0	338	1,283
12:30 PM	0	9	87	3	0	3	8	98	6	0	0	3	29	7	0	0	1	44	11	0	309	1,300
12:45 PM	4	6	74	4	0	3	7	89	6	0	0	11	52	10	0	0	6	40	6	0	318	1,354
1:00 PM	3	5	107	3	0	3	3	99	3	0	0	3	36	3	0	0	3	36	11	0	318	1,387
1:15 PM	2	8	114	5	0	2	5	110	3	0	0	7	47	4	0	0	4	42	2	0	355	0
1:30 PM	4	7	99	2	0	4	11	91	10	0	0	7	53	5	0	0	16	51	3	0	363	0
1:45 PM	5	3	99	2	0	3	5	109	2	0	0	4	47	4	0	0	4	53	11	0	351	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	6	16	346	16	0	10	37	511	18	0	0	25	189	20	0	0	23	165	33	0	1,415
Mediums	0	1	19	0	0	0	0	20	1	0	0	1	0	0	0	0	0	1	0	0	43
Total	6	17	366	16	0	10	37	532	19	0	0	26	189	20	0	0	23	166	33	0	1,460
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
Bicycles on Crosswalk			2					0					0					1			3
Heavy Vehicle Percentage			0.2%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.91					0.88					0.82					0.84			0.93
Peak Hour Factor (PHF)	0.70	0.78	0.92	0.71	0.00	0.81	0.84	0.88	0.55	0.00	0.00	0.64	0.91	0.70	0.00	0.00	0.45	0.86	0.75	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	3	2	65	2	0	2	7	94	3	0	0	6	42	8	0	0	3	39	9	0	285
11:15 AM	3	2	81	2	0	2	7	130	4	0	0	6	43	3	0	0	4	44	7	0	338
11:30 AM	0	3	84	3	0	4	10	148	5	0	0	9	50	6	0	0	5	39	12	0	378
11:45 AM	1	7	81	6	0	2	11	129	6	0	0	4	44	5	0	0	8	47	7	0	358
12:00 PM	2	4	100	5	0	2	9	104	3	0	0	6	52	6	0	0	6	35	7	0	341
12:15 PM	2	8	101	3	0	4	3	97	5	0	0	7	36	5	0	0	9	41	7	0	328
12:30 PM	0	9	84	3	0	3	8	90	6	0	0	3	28	7	0	0	1	44	11	0	297
12:45 PM	4	6	72	4	0	3	6	80	6	0	0	11	52	10	0	0	6	40	6	0	306
1:00 PM	3	4	101	3	0	3	2	95	3	0	0	3	36	3	0	0	3	36	11	0	306
1:15 PM	2	8	109	5	0	2	5	101	3	0	0	7	47	4	0	0	4	42	2	0	341
1:30 PM	4	7	96	2	0	4	11	85	10	0	0	7	53	5	0	0	16	51	3	0	354
1:45 PM	5	3	96	2	0	3	5	105	2	0	0	3	47	4	0	0	4	52	11	0	342
Mediums																					
11:00 AM	0	0	2	0	0	0	2	4	0	0	0	1	0	0	0	0	0	0	1	0	10
11:15 AM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
11:30 AM	0	1	6	0	0	0	0	3	0	0	0	1	0	0	0	0	0	1	0	0	12
11:45 AM	0	0	4	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	12
12:00 PM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
12:15 PM	0	0	3	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	10
12:30 PM	0	0	3	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	0	0	12
12:45 PM	0	0	2	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	12
1:00 PM	0	1	6	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	12
1:15 PM	0	0	5	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	14
1:30 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
1:45 PM	0	0	3	0	0	0	0	4	0	0	0	1	0	0	0	0	0	1	0	0	9
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	7
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	0	1	0	0	0	0	0	0	1	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	1	0	0	0	0	1	1	1	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	3	0	3	0	0	0	0	0	0	1	0	1
11:15 AM	0	1	1	0	0	0	0	1	1	0	1	1
11:30 AM	2	0	2	0	0	0	1	0	1	3	1	4
11:45 AM	0	2	2	0	0	0	1	0	1	0	3	3
12:00 PM	3	1	4	0	0	0	1	0	1	3	0	3
12:15 PM	3	2	5	0	0	0	0	1	1	1	0	1
12:30 PM	3	2	5	0	0	0	1	0	1	1	2	3
12:45 PM	5	0	5	0	0	0	0	0	0	2	1	3
1:00 PM	3	0	3	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	1	0	0	0	2	2	4	0	1	1
1:30 PM	0	2	2	0	0	0	0	0	0	0	1	1
1:45 PM	7	1	8	0	0	0	1	1	2	6	2	8

All Traffic Data Services

11 WASHINGTON ST & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	2	7	68	7	0	0	9	100	8	0	0	8	49	8	0	0	4	46	4	0	320	1,453
3:45 PM	1	9	101	5	0	0	9	92	6	0	0	7	60	9	0	0	4	78	3	0	384	1,466
4:00 PM	1	9	85	6	0	0	11	136	8	0	0	10	67	8	0	0	3	53	6	0	403	1,463
4:15 PM	2	5	109	2	0	2	6	95	3	0	0	5	43	9	0	0	7	54	4	0	346	1,425
4:30 PM	2	9	82	7	0	3	5	81	6	0	0	4	59	7	0	0	2	60	6	0	333	1,450
4:45 PM	2	12	84	5	0	4	12	114	4	0	0	5	60	5	0	0	4	61	9	0	381	1,473
5:00 PM	1	7	84	5	0	3	8	109	9	0	0	5	55	7	0	0	1	55	16	0	365	1,455
5:15 PM	5	4	116	2	0	5	11	96	3	0	0	1	50	3	0	0	2	67	6	0	371	1,422
5:30 PM	3	8	91	2	0	0	4	105	6	0	0	4	44	5	0	0	6	73	5	0	356	1,364
5:45 PM	1	5	96	3	0	2	2	124	5	0	0	1	46	3	0	0	3	62	10	0	363	0
6:00 PM	9	14	87	3	0	0	13	91	6	0	0	1	36	5	0	0	3	58	6	0	332	0
6:15 PM	2	7	81	6	0	2	7	92	3	0	0	1	37	3	0	0	5	58	9	0	313	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	11	31	364	14	0	12	35	414	22	0	0	15	208	20	0	0	13	256	36	0	1,451
Mediums	0	0	10	0	0	0	0	10	0	0	0	0	1	0	0	0	0	0	0	0	21
Total	11	31	375	14	0	12	35	424	22	0	0	15	209	20	0	0	13	256	36	0	1,473
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	1	0	0	12
Bicycles on Crosswalk			1					0					4					4			9
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.88					0.92					0.85					0.91			0.97
Peak Hour Factor (PHF)	0.50	0.73	0.84	0.71	0.00	0.75	0.75	0.88	0.78	0.00	0.00	0.75	0.85	0.94	0.00	0.00	0.64	0.89	0.58	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	2	7	65	7	0	0	9	93	8	0	0	8	49	8	0	0	4	46	4	0	310
3:45 PM	1	9	96	5	0	0	9	89	6	0	0	7	59	9	0	0	4	78	3	0	375
4:00 PM	1	9	83	6	0	0	11	132	8	0	0	10	67	8	0	0	3	52	6	0	396
4:15 PM	2	5	107	2	0	2	6	92	3	0	0	5	43	9	0	0	7	54	4	0	341
4:30 PM	2	9	80	7	0	3	5	78	6	0	0	4	59	7	0	0	2	60	6	0	328
4:45 PM	2	12	81	5	0	4	12	109	4	0	0	5	60	5	0	0	4	61	9	0	373
5:00 PM	1	7	81	5	0	3	8	108	9	0	0	5	55	7	0	0	1	55	16	0	361
5:15 PM	5	4	114	2	0	5	11	94	3	0	0	1	50	3	0	0	2	67	6	0	367
5:30 PM	3	8	88	2	0	0	4	103	6	0	0	4	43	5	0	0	6	73	5	0	350
5:45 PM	1	5	95	3	0	2	2	123	5	0	0	1	46	3	0	0	3	62	10	0	361
6:00 PM	9	14	85	3	0	0	13	88	6	0	0	1	36	5	0	0	3	58	6	0	327
6:15 PM	2	7	80	6	0	2	7	89	3	0	0	1	37	3	0	0	5	58	9	0	309
Mediums																					
3:30 PM	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	9
3:45 PM	0	0	5	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	9
4:00 PM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	7
4:15 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	6
5:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	4
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	1	0	1	0	1	1
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	2	1	1	2
5:00 PM	0	1	1	0	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	7	9	16	0	0	0	1	0	1	0	0	0
3:45 PM	0	5	5	0	0	0	3	0	3	0	0	0
4:00 PM	3	0	3	0	0	0	0	0	0	4	0	4
4:15 PM	4	1	5	0	0	0	3	0	3	4	0	4
4:30 PM	1	3	4	0	0	0	0	2	2	0	2	2
4:45 PM	1	1	2	0	0	0	0	0	0	1	1	2
5:00 PM	3	0	3	0	0	0	1	0	1	1	0	1
5:15 PM	3	1	4	0	0	0	1	0	1	1	0	1
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	1	1	2	0	0	0	0	1	1	0	0	0
6:00 PM	1	3	4	0	0	0	1	1	2	1	1	2
6:15 PM	1	2	3	0	0	0	1	2	3	0	1	1

All Traffic Data Services

12 MORNINGSIDE DR & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	1	1	16	3	0	0	0	24	0	0	0	0	3	0	0	0	0	3	2	0	53	280
6:15 AM	0	0	24	0	0	0	1	32	0	0	0	0	0	0	0	0	0	2	3	0	62	312
6:30 AM	0	0	27	0	0	0	3	40	0	0	0	1	2	0	0	0	0	2	1	0	76	381
6:45 AM	0	0	35	1	0	0	2	45	0	0	0	0	0	0	0	0	1	3	2	0	89	445
7:00 AM	1	2	36	1	0	0	3	28	0	0	0	1	3	0	0	0	1	5	4	0	85	499
7:15 AM	0	3	56	0	0	0	2	54	0	0	0	1	8	2	0	0	1	3	1	0	131	546
7:30 AM	0	1	52	0	0	1	0	63	0	0	0	1	10	2	0	0	0	6	4	0	140	564
7:45 AM	2	2	45	1	0	0	1	62	0	0	0	4	7	1	0	0	1	12	5	0	143	573
8:00 AM	1	3	52	0	0	0	0	60	0	0	0	3	3	1	0	0	0	8	1	0	132	608
8:15 AM	0	2	63	2	0	0	1	57	1	0	0	3	7	3	0	0	0	6	4	0	149	0
8:30 AM	0	1	58	0	0	0	7	61	2	0	0	1	5	0	0	0	1	11	2	0	149	0
8:45 AM	2	4	63	2	0	0	2	80	2	0	0	4	6	0	0	0	1	9	3	0	178	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	3	8	221	4	0	0	9	240	4	0	0	10	21	4	0	0	2	33	10	0	569
Mediums	0	2	15	0	0	0	0	17	1	0	0	1	0	0	0	0	0	1	0	0	37
Total	3	10	236	4	0	0	10	258	5	0	0	11	21	4	0	0	2	34	10	0	608
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	0	0	7
Bicycles on Crosswalk			2					0					1					0			3
Heavy Vehicle Percentage			0.0%					0.7%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.89					0.81					0.87					0.71			0.85
Peak Hour Factor (PHF)	0.38	0.63	0.94	0.33	0.00	0.25	0.36	0.81	0.63	0.00	0.00	0.69	0.70	0.58	0.00	0.00	0.75	0.77	0.70	0.00	0.85

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	1	1	13	3	0	0	0	23	0	0	0	0	3	0	0	0	0	3	2	0	49
6:15 AM	0	0	21	0	0	0	1	27	0	0	0	0	0	0	0	0	0	2	3	0	54
6:30 AM	0	0	23	0	0	0	3	37	0	0	0	1	2	0	0	0	0	2	1	0	69
6:45 AM	0	0	32	1	0	0	2	41	0	0	0	0	0	0	0	0	1	3	2	0	82
7:00 AM	1	2	34	1	0	0	3	26	0	0	0	1	3	0	0	0	1	5	4	0	81
7:15 AM	0	3	51	0	0	0	2	47	0	0	0	1	6	2	0	0	1	3	0	0	116
7:30 AM	0	1	47	0	0	1	0	59	0	0	0	1	9	2	0	0	0	6	3	0	129
7:45 AM	2	2	44	1	0	0	1	60	0	0	0	4	7	1	0	0	1	12	5	0	140
8:00 AM	1	3	47	0	0	0	0	53	0	0	0	3	3	1	0	0	0	7	1	0	119
8:15 AM	0	1	58	2	0	0	1	55	1	0	0	3	7	3	0	0	0	6	4	0	141
8:30 AM	0	1	57	0	0	0	6	57	2	0	0	1	5	0	0	0	1	11	2	0	143
8:45 AM	2	3	59	2	0	0	2	75	1	0	0	3	6	0	0	0	1	9	3	0	166
Mediums																					
6:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
6:30 AM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
6:45 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
7:00 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	4	0	0	0	0	7	0	0	0	0	2	0	0	0	0	0	1	0	14
7:30 AM	0	0	5	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	1	0	10
7:45 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	13
8:15 AM	0	1	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	1	4	0	0	0	0	5	1	0	0	1	0	0	0	0	0	0	0	0	12
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
6:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	2	0	0	5
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	1	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 AM	1	0	1	0	0	0	1	0	1	0	1	1
6:30 AM	2	0	2	0	0	0	0	0	0	2	0	2
6:45 AM	2	0	2	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	1	0	2	2
7:15 AM	0	0	0	1	0	1	0	0	0	1	0	1
7:30 AM	2	1	3	0	0	0	0	0	0	2	2	4
7:45 AM	0	0	0	0	1	1	1	1	2	0	0	0
8:00 AM	0	2	2	2	0	2	0	0	0	1	2	3
8:15 AM	0	0	0	0	0	0	0	2	2	1	0	1
8:30 AM	0	0	0	0	2	2	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	2	2	0	1	1

All Traffic Data Services

12 MORNINGSIDE DR & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:15 AM - 12:15 PM
Peak 15-Minutes
11:30 AM - 11:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	7	7	87	1	0	0	7	96	3	0	0	1	4	2	0	1	3	8	6	0	233	1,096
11:15 AM	3	6	93	2	0	1	8	152	1	0	0	3	5	2	0	1	1	5	2	0	285	1,129
11:30 AM	2	2	88	2	0	0	6	172	3	0	0	5	3	2	0	0	1	9	3	0	298	1,111
11:45 AM	3	1	96	4	0	2	6	135	8	0	0	4	3	2	0	0	1	14	1	0	280	1,047
12:00 PM	3	3	112	4	0	2	4	116	1	0	0	5	3	0	0	0	1	8	4	0	266	994
12:15 PM	6	4	105	4	0	1	3	112	2	0	0	5	2	3	0	0	4	12	4	0	267	985
12:30 PM	4	2	94	3	0	0	2	108	2	0	0	1	3	5	0	0	4	6	0	0	234	983
12:45 PM	4	6	81	2	0	1	3	104	0	0	0	8	4	0	0	0	1	11	2	0	227	1,005
1:00 PM	5	2	110	1	0	4	2	108	2	0	0	5	0	3	0	0	3	11	1	0	257	1,044
1:15 PM	2	3	119	0	0	0	4	120	0	0	0	4	3	3	0	0	1	5	1	0	265	0
1:30 PM	5	4	109	5	0	1	4	98	1	0	0	5	6	1	0	1	0	15	1	0	256	0
1:45 PM	3	7	94	4	0	2	6	114	4	0	0	5	7	2	0	0	4	10	4	0	266	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2
Lights	11	12	368	12	0	5	24	551	13	0	0	17	13	6	0	1	3	36	9	0	1,081
Mediums	0	0	21	0	0	0	0	23	0	0	0	0	1	0	0	0	0	0	1	0	46
Total	11	12	389	12	0	5	24	575	13	0	0	17	14	6	0	1	4	36	10	0	1,129
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0					4					1					2			7
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					2.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.95					0.85					0.79					0.78			0.95
Peak Hour Factor (PHF)	0.79	0.57	0.91	0.94	0.00	0.44	0.84	0.84	0.47	0.00	0.00	0.69	0.57	0.55	0.00	0.50	0.75	0.77	0.50	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	7	7	83	1	0	0	7	92	3	0	0	1	4	2	0	1	2	7	6	0	223
11:15 AM	3	6	88	2	0	1	8	144	1	0	0	3	5	2	0	1	1	5	2	0	272
11:30 AM	2	2	80	2	0	0	6	168	3	0	0	5	2	2	0	0	0	9	2	0	283
11:45 AM	3	1	92	4	0	2	6	129	8	0	0	4	3	2	0	0	1	14	1	0	270
12:00 PM	3	3	108	4	0	2	4	110	1	0	0	5	3	0	0	0	1	8	4	0	256
12:15 PM	6	4	102	4	0	1	3	106	2	0	0	5	2	3	0	0	4	12	4	0	258
12:30 PM	4	2	91	3	0	0	2	102	2	0	0	1	3	5	0	0	4	6	0	0	225
12:45 PM	4	6	79	2	0	1	3	93	0	0	0	8	4	0	0	0	1	11	2	0	214
1:00 PM	5	2	104	1	0	4	1	106	2	0	0	5	0	3	0	0	3	11	1	0	248
1:15 PM	2	3	115	0	0	0	4	109	0	0	0	4	3	3	0	0	1	5	1	0	250
1:30 PM	5	4	104	5	0	1	4	94	0	0	0	5	6	1	0	1	0	13	1	0	244
1:45 PM	3	7	94	4	0	2	6	110	4	0	0	5	7	2	0	0	4	10	4	0	262
Mediums																					
11:00 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	9
11:15 AM	0	0	5	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	12
11:30 AM	0	0	8	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	1	0	14
11:45 AM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
12:15 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
12:30 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
12:45 PM	0	0	2	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	13
1:00 PM	0	0	6	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	9
1:15 PM	0	0	4	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	15
1:30 PM	0	0	5	0	0	0	0	4	1	0	0	0	0	0	0	0	0	2	0	0	12
1:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	1	0	1	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	2	0	2	0	1	1	0	1	1
12:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	2	2
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:45 PM	0	0	0	1	0	1	0	0	0	0	1	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	1	0	1	1	2	3	1	1	2
11:15 AM	0	0	0	1	0	1	3	0	3	0	1	1
11:30 AM	0	1	1	0	0	0	2	1	3	1	0	1
11:45 AM	0	0	0	1	0	1	0	1	1	0	2	2
12:00 PM	0	3	3	0	0	0	0	1	1	1	0	1
12:15 PM	2	0	2	1	0	1	2	0	2	0	0	0
12:30 PM	0	1	1	0	2	2	0	3	3	2	0	2
12:45 PM	1	2	3	0	1	1	0	0	0	1	2	3
1:00 PM	0	0	0	0	0	0	1	0	1	3	2	5
1:15 PM	2	0	2	0	1	1	0	2	2	1	1	2
1:30 PM	1	1	2	0	0	0	0	0	0	1	1	2
1:45 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

12 MORNINGSIDE DR & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	2	5	96	4	0	2	2	103	1	0	0	1	7	0	0	0	3	15	3	0	244	1,034
3:45 PM	2	2	107	2	0	2	3	99	1	0	0	3	8	2	0	0	5	15	2	0	253	1,013
4:00 PM	5	4	103	1	0	1	4	143	5	0	0	3	9	3	0	0	2	8	2	0	293	1,027
4:15 PM	2	6	99	1	0	2	1	93	4	0	0	3	16	0	0	0	2	12	3	0	244	994
4:30 PM	0	4	94	1	0	2	3	94	1	0	0	1	2	2	0	0	2	12	5	0	223	1,003
4:45 PM	5	7	95	4	0	1	4	120	0	0	0	1	9	0	0	0	2	16	3	0	267	1,046
5:00 PM	2	3	93	2	0	2	7	120	3	0	0	4	7	0	0	0	0	16	1	0	260	1,016
5:15 PM	2	5	118	2	0	2	4	92	3	0	0	1	8	1	0	0	0	14	1	0	253	985
5:30 PM	2	6	104	3	0	1	4	115	0	0	0	4	5	2	0	0	2	13	5	0	266	950
5:45 PM	1	2	87	3	0	1	5	119	0	0	0	4	5	0	0	0	2	7	1	0	237	0
6:00 PM	2	3	98	2	0	2	2	104	1	0	0	2	4	0	0	0	0	6	3	0	229	0
6:15 PM	3	10	72	3	0	2	7	96	1	0	0	2	7	0	0	0	2	13	0	0	218	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	11	21	398	11	0	6	19	437	6	0	0	9	29	3	0	0	4	58	10	0	1,022
Mediums	0	0	11	0	0	0	0	10	0	0	0	1	0	0	0	0	0	1	0	0	23
Total	11	21	410	11	0	6	19	447	6	0	0	10	29	3	0	0	4	59	10	0	1,046
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					3					2					2			7
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.89					0.78					0.72					0.88			0.98
Peak Hour Factor (PHF)	0.60	0.53	0.87	0.69	0.00	0.88	0.71	0.79	0.55	0.00	0.00	0.81	0.63	0.58	0.00	0.00	0.60	0.92	0.65	0.00	0.98

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	2	5	93	4	0	2	2	98	1	0	0	1	7	0	0	0	3	15	3	0	236
3:45 PM	2	2	102	2	0	2	3	95	1	0	0	3	8	2	0	0	5	15	2	0	244
4:00 PM	5	4	102	1	0	1	4	141	4	0	0	3	9	3	0	0	2	8	2	0	289
4:15 PM	2	6	98	1	0	2	1	90	4	0	0	3	16	0	0	0	2	12	3	0	240
4:30 PM	0	4	92	1	0	2	3	92	1	0	0	1	2	2	0	0	2	12	5	0	219
4:45 PM	5	7	91	4	0	1	4	116	0	0	0	1	9	0	0	0	2	16	3	0	259
5:00 PM	2	3	90	2	0	2	7	118	3	0	0	4	7	0	0	0	0	16	1	0	255
5:15 PM	2	5	117	2	0	2	4	90	3	0	0	0	8	1	0	0	0	13	1	0	248
5:30 PM	2	6	100	3	0	1	4	113	0	0	0	4	5	2	0	0	2	13	5	0	260
5:45 PM	1	2	87	3	0	1	5	118	0	0	0	4	5	0	0	0	2	7	1	0	236
6:00 PM	2	3	94	2	0	2	2	101	1	0	0	2	4	0	0	0	0	6	3	0	222
6:15 PM	3	10	71	3	0	2	7	93	1	0	0	2	7	0	0	0	2	13	0	0	214
Mediums																					
3:30 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
3:45 PM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00 PM	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	5
5:30 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
6:15 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	3	0	3	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	1	1	2	1	0	1	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	2
4:45 PM	0	0	0	1	0	1	0	2	2	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	1	1	2	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
6:00 PM	0	0	0	1	1	2	0	0	0	0	0	0
6:15 PM	0	0	0	2	0	2	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	0	0	1	1	2
3:45 PM	2	0	2	0	0	0	4	1	5	2	1	3
4:00 PM	0	0	0	0	1	1	5	1	6	1	2	3
4:15 PM	0	1	1	1	0	1	2	1	3	3	4	7
4:30 PM	0	0	0	1	0	1	1	0	1	1	1	2
4:45 PM	1	1	2	1	0	1	2	1	3	1	0	1
5:00 PM	3	2	5	0	2	2	0	3	3	2	2	4
5:15 PM	1	1	2	0	2	2	3	0	3	0	2	2
5:30 PM	2	2	4	1	0	1	2	1	3	1	0	1
5:45 PM	0	0	0	0	0	0	0	3	3	1	0	1
6:00 PM	0	0	0	1	0	1	1	0	1	1	0	1
6:15 PM	0	0	0	0	0	0	2	5	7	1	0	1

All Traffic Data Services

13 CARLISLE BLVD & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE Eastbound					CENTRAL AVE Westbound					CARLISLE BLVD Northbound					CARLISLE BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	19	0	0	0	3	21	4	0	0	1	18	1	0	0	0	15	0	0	82	423
6:15 AM	0	1	20	1	0	0	5	31	1	0	0	1	11	2	0	0	3	9	1	0	86	490
6:30 AM	0	2	21	3	0	0	4	38	3	0	0	3	17	1	0	0	3	19	3	0	117	636
6:45 AM	0	3	29	1	0	0	5	38	5	0	0	1	15	3	0	0	6	30	2	0	138	752
7:00 AM	0	4	31	4	0	0	7	28	1	0	0	4	19	0	0	0	8	37	6	0	149	843
7:15 AM	0	3	39	4	0	1	10	41	7	0	0	3	48	9	0	0	8	56	3	0	232	943
7:30 AM	0	6	42	5	0	0	4	65	3	0	0	2	44	3	0	0	6	49	4	0	233	956
7:45 AM	0	6	41	7	0	0	7	63	4	0	0	5	33	3	0	0	3	53	4	0	229	950
8:00 AM	1	12	45	3	0	1	13	48	4	0	0	10	44	2	0	0	10	55	1	0	249	1,026
8:15 AM	1	9	50	9	0	2	14	53	2	0	0	5	43	2	0	0	14	38	3	0	245	0
8:30 AM	2	9	50	6	0	1	3	61	7	0	0	4	31	3	0	0	12	33	5	0	227	0
8:45 AM	2	6	49	7	0	0	9	81	10	0	0	3	60	3	0	0	18	48	9	0	305	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	6	36	179	21	0	4	39	226	22	0	0	19	175	9	0	0	53	169	18	0	976
Mediums	0	0	15	4	0	0	0	16	1	0	0	3	3	1	0	0	1	5	0	0	49
Total	6	36	194	25	0	4	39	243	23	0	0	22	178	10	0	0	54	174	18	0	1,026
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.3%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.77					0.80					0.94			0.84
Peak Hour Factor (PHF)	0.75	0.75	0.97	0.69	0.00	0.50	0.70	0.75	0.58	0.00	0.00	0.60	0.74	0.47	0.00	0.00	0.75	0.95	0.50	0.00	0.84

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	16	0	0	0	3	20	4	0	0	1	18	1	0	0	0	15	0	0	78
6:15 AM	0	1	17	1	0	0	5	25	1	0	0	1	11	2	0	0	3	9	1	0	77
6:30 AM	0	2	19	2	0	0	4	35	3	0	0	2	17	1	0	0	3	18	2	0	108
6:45 AM	0	3	26	1	0	0	5	36	5	0	0	1	15	3	0	0	6	29	2	0	132
7:00 AM	0	4	28	4	0	0	6	26	1	0	0	4	14	0	0	0	7	37	6	0	137
7:15 AM	0	3	35	3	0	1	9	37	6	0	0	2	46	9	0	0	7	55	3	0	216
7:30 AM	0	6	37	5	0	0	4	60	3	0	0	2	44	3	0	0	6	49	3	0	222
7:45 AM	0	6	40	7	0	0	7	60	4	0	0	5	33	3	0	0	3	51	4	0	223
8:00 AM	1	12	41	3	0	1	13	43	4	0	0	9	43	2	0	0	10	52	1	0	235
8:15 AM	1	9	46	8	0	2	14	50	2	0	0	4	42	1	0	0	14	38	3	0	234
8:30 AM	2	9	47	5	0	1	3	56	7	0	0	4	31	3	0	0	12	33	5	0	218
8:45 AM	2	6	45	5	0	0	9	77	9	0	0	2	59	3	0	0	17	46	9	0	289
Mediums																					
6:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
6:30 AM	0	0	2	1	0	0	0	2	0	0	0	1	0	0	0	0	0	1	1	0	8
6:45 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	6
7:00 AM	0	0	3	0	0	0	1	2	0	0	0	0	5	0	0	0	1	0	0	0	12
7:15 AM	0	0	3	1	0	0	1	4	1	0	0	1	2	0	0	0	1	1	0	0	15
7:30 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	10
7:45 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	6
8:00 AM	0	0	4	0	0	0	0	5	0	0	0	1	1	0	0	0	0	3	0	0	14
8:15 AM	0	0	4	1	0	0	0	3	0	0	0	1	1	1	0	0	0	0	0	0	11
8:30 AM	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
8:45 AM	0	0	4	2	0	0	0	4	1	0	0	1	1	0	0	0	1	2	0	0	16
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	3	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 AM	0	0	0	0	2	2	0	1	1	1	2	3
6:30 AM	0	0	0	0	0	0	2	0	2	1	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	1	2	3	1	1	2
7:15 AM	0	2	2	0	1	1	1	1	2	0	2	2
7:30 AM	1	0	1	0	0	0	0	0	0	3	1	4
7:45 AM	1	0	1	0	0	0	2	1	3	3	0	3
8:00 AM	1	1	2	1	0	1	0	0	0	2	3	5
8:15 AM	0	0	0	1	0	1	1	3	4	1	0	1
8:30 AM	0	0	0	1	0	1	3	1	4	0	1	1
8:45 AM	0	0	0	0	0	0	1	1	2	0	1	1

All Traffic Data Services

13 CARLISLE BLVD & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:15 AM - 12:15 PM
Peak 15-Minutes
11:45 AM - 12:00 PM

Traffic Counts - All Vehicles

	CENTRAL AVE Eastbound					CENTRAL AVE Westbound					CARLISLE BLVD Northbound					CARLISLE BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	2	17	60	6	0	2	4	90	16	0	0	5	31	4	0	0	13	47	10	0	307	1,507
11:15 AM	5	18	85	8	0	1	12	127	19	0	0	4	36	5	0	0	14	32	10	0	376	1,586
11:30 AM	2	27	83	7	0	2	18	131	24	0	0	10	35	3	0	0	8	42	17	0	409	1,564
11:45 AM	4	13	78	10	0	5	10	122	10	0	0	16	43	10	0	0	19	56	19	0	415	1,527
12:00 PM	5	17	97	9	0	1	7	119	9	0	0	12	32	8	0	0	18	33	19	0	386	1,466
12:15 PM	4	12	88	10	0	2	15	98	11	0	0	13	36	8	0	0	13	29	15	0	354	1,458
12:30 PM	1	22	79	11	0	5	12	95	12	0	0	8	49	3	0	0	11	53	11	0	372	1,484
12:45 PM	5	22	67	8	0	0	7	92	14	0	0	7	42	7	0	0	16	58	9	0	354	1,478
1:00 PM	2	10	105	10	0	1	11	96	14	0	0	9	45	5	0	0	10	48	12	0	378	1,502
1:15 PM	2	15	106	9	0	3	14	109	5	0	0	2	33	7	0	0	16	48	11	0	380	0
1:30 PM	3	16	99	6	0	4	6	86	17	0	0	6	44	8	0	0	18	48	5	0	366	0
1:45 PM	1	19	78	12	0	3	14	100	14	0	0	12	45	12	0	0	14	47	7	0	378	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	16	74	325	32	0	9	47	474	61	0	0	40	143	26	0	0	59	157	65	0	1,528
Mediums	0	1	18	2	0	0	0	24	1	0	0	2	3	0	0	0	0	6	0	0	57
Total	16	75	343	34	0	9	47	499	62	0	0	42	146	26	0	0	59	163	65	0	1,586
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					2			2
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.93					0.88					0.86					0.91			0.96
Peak Hour Factor (PHF)	0.80	0.69	0.92	0.91	0.00	0.65	0.69	0.95	0.72	0.00	0.00	0.80	0.88	0.67	0.00	0.00	0.80	0.89	0.92	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	2	16	56	6	0	2	4	86	14	0	0	5	30	4	0	0	13	46	10	0	294
11:15 AM	5	18	82	7	0	1	12	120	18	0	0	4	35	5	0	0	14	30	10	0	361
11:30 AM	2	27	76	7	0	2	18	126	24	0	0	9	35	3	0	0	8	42	17	0	396
11:45 AM	4	13	74	10	0	5	10	115	10	0	0	16	42	10	0	0	19	53	19	0	400
12:00 PM	5	16	93	8	0	1	7	113	9	0	0	11	31	8	0	0	18	32	19	0	371
12:15 PM	4	12	84	8	0	2	15	92	10	0	0	13	35	8	0	0	13	27	15	0	338
12:30 PM	1	22	76	11	0	5	12	90	12	0	0	8	48	3	0	0	11	53	11	0	363
12:45 PM	5	22	65	8	0	0	7	83	12	0	0	6	41	7	0	0	16	58	9	0	339
1:00 PM	2	9	99	9	0	1	11	93	14	0	0	8	45	5	0	0	10	47	12	0	365
1:15 PM	2	15	103	9	0	3	13	102	5	0	0	2	32	7	0	0	15	46	11	0	365
1:30 PM	3	16	94	6	0	4	6	83	17	0	0	6	44	8	0	0	18	48	5	0	358
1:45 PM	1	19	77	10	0	3	14	96	13	0	0	11	44	12	0	0	13	47	7	0	367
Mediums																					
11:00 AM	0	1	4	0	0	0	0	4	2	0	0	0	1	0	0	0	0	1	0	0	13
11:15 AM	0	0	3	1	0	0	0	6	1	0	0	0	1	0	0	0	0	2	0	0	14
11:30 AM	0	0	7	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	13
11:45 AM	0	0	4	0	0	0	0	7	0	0	0	0	1	0	0	0	0	3	0	0	15
12:00 PM	0	1	4	1	0	0	0	6	0	0	0	1	1	0	0	0	0	1	0	0	15
12:15 PM	0	0	4	2	0	0	0	6	1	0	0	0	1	0	0	0	0	2	0	0	16
12:30 PM	0	0	3	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	9
12:45 PM	0	0	2	0	0	0	0	9	2	0	0	1	1	0	0	0	0	0	0	0	15
1:00 PM	0	1	6	1	0	0	0	3	0	0	0	1	0	0	0	0	0	1	0	0	13
1:15 PM	0	0	3	0	0	0	1	7	0	0	0	0	1	0	0	0	1	2	0	0	15
1:30 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
1:45 PM	0	0	1	2	0	0	0	4	1	0	0	1	1	0	0	0	1	0	0	0	11
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	1	0	0	0	0	0	0	2	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	1	0	1	0	0	0	1	0	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:15 AM	0	0	0	0	0	0	1	2	3	1	0	1
11:30 AM	1	1	2	1	0	1	2	0	2	5	1	6
11:45 AM	0	2	2	0	0	0	0	1	1	3	4	7
12:00 PM	2	0	2	0	1	1	0	1	1	3	0	3
12:15 PM	0	0	0	0	1	1	1	3	4	0	1	1
12:30 PM	5	1	6	0	1	1	0	1	1	1	1	2
12:45 PM	2	0	2	1	0	1	2	2	4	0	1	1
1:00 PM	0	0	0	0	0	0	4	1	5	1	0	1
1:15 PM	1	0	1	0	4	4	3	0	3	2	3	5
1:30 PM	2	1	3	1	0	1	2	1	3	5	2	7
1:45 PM	0	1	1	0	0	0	0	1	1	0	2	2

All Traffic Data Services

13 CARLISLE BLVD & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	19	76	10	0	3	8	105	10	0	0	5	40	9	0	0	19	49	10	0	363	1,622
3:45 PM	6	16	86	18	0	2	10	86	15	0	0	6	84	9	0	0	11	62	14	0	425	1,636
4:00 PM	1	16	94	7	0	0	8	129	17	0	0	10	72	8	0	0	13	60	11	0	446	1,629
4:15 PM	3	12	102	10	0	3	13	83	8	0	0	9	57	6	0	0	20	55	7	0	388	1,585
4:30 PM	0	22	80	8	0	0	14	78	12	0	0	6	74	5	0	0	12	55	11	0	377	1,643
4:45 PM	6	22	84	18	0	4	15	92	12	0	0	6	75	6	0	0	22	43	13	0	418	1,678
5:00 PM	2	22	73	15	0	1	16	101	14	0	0	10	56	5	0	0	12	64	11	0	402	1,666
5:15 PM	4	24	116	25	0	3	9	93	11	0	0	10	58	3	0	0	19	56	15	0	446	1,628
5:30 PM	9	11	84	20	0	2	15	101	10	0	0	13	62	6	0	0	23	44	12	0	412	1,526
5:45 PM	6	19	87	17	0	3	12	115	10	0	0	12	46	9	0	0	15	44	11	0	406	0
6:00 PM	6	20	80	11	0	3	9	87	10	0	0	6	45	7	0	0	10	55	15	0	364	0
6:15 PM	8	22	71	9	0	2	11	98	10	0	0	9	34	6	0	0	12	40	12	0	344	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	21	77	344	77	0	10	53	379	47	0	0	38	251	20	0	0	74	206	51	0	1,648
Mediums	0	2	12	1	0	0	2	8	0	0	0	1	0	0	0	0	2	1	0	0	29
Total	21	79	357	78	0	10	55	387	47	0	0	39	251	20	0	0	76	207	51	0	1,678
Bicycles on Road	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	6
Bicycles on Crosswalk			4					5					4					1			14
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.80					0.92					0.87					0.93			0.94
Peak Hour Factor (PHF)	0.81	0.94	0.79	0.78	0.00	0.92	0.91	0.89	0.76	0.00	0.00	0.87	0.85	0.89	0.00	0.00	0.83	0.94	0.88	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	19	74	9	0	3	8	101	10	0	0	5	39	9	0	0	18	49	10	0	354
3:45 PM	6	16	81	18	0	2	10	82	15	0	0	6	83	9	0	0	11	61	13	0	413
4:00 PM	1	16	92	7	0	0	8	126	16	0	0	10	70	8	0	0	13	60	11	0	438
4:15 PM	3	12	100	9	0	3	13	80	8	0	0	8	57	6	0	0	20	53	7	0	379
4:30 PM	0	22	78	8	0	0	9	74	12	0	0	5	72	5	0	0	12	55	11	0	363
4:45 PM	6	21	80	18	0	4	14	89	12	0	0	6	75	6	0	0	22	43	13	0	409
5:00 PM	2	22	70	14	0	1	16	99	14	0	0	9	56	5	0	0	12	64	11	0	395
5:15 PM	4	23	114	25	0	3	9	91	11	0	0	10	58	3	0	0	18	56	15	0	440
5:30 PM	9	11	80	20	0	2	14	100	10	0	0	13	62	6	0	0	22	43	12	0	404
5:45 PM	6	19	87	16	0	3	12	113	10	0	0	11	46	9	0	0	15	44	11	0	402
6:00 PM	6	19	76	11	0	3	9	85	10	0	0	6	45	7	0	0	10	55	15	0	357
6:15 PM	8	22	69	9	0	2	11	94	10	0	0	9	34	6	0	0	12	40	12	0	338
Mediums																					
3:30 PM	0	0	2	1	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	8
3:45 PM	0	0	5	0	0	0	0	4	0	0	0	0	1	0	0	0	0	1	1	0	12
4:00 PM	0	0	2	0	0	0	0	3	1	0	0	0	2	0	0	0	0	0	0	0	8
4:15 PM	0	0	2	1	0	0	0	3	0	0	0	1	0	0	0	0	0	2	0	0	9
4:30 PM	0	0	2	0	0	0	5	4	0	0	0	1	2	0	0	0	0	0	0	0	14
4:45 PM	0	1	3	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	8
5:00 PM	0	0	3	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	7
5:15 PM	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	6
5:30 PM	0	0	4	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	8
5:45 PM	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	4
6:00 PM	0	1	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	7
6:15 PM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	1	1	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	2	0	2	0	0	0	0	1	1	0	1	1
5:00 PM	0	0	0	3	0	3	3	0	3	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	2	0	2	1	1	2	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	1	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	1	0	1	2	2	4	0	1	1
3:45 PM	3	2	5	0	2	2	0	3	3	2	1	3
4:00 PM	4	3	7	0	0	0	7	1	8	0	0	0
4:15 PM	0	1	1	0	0	0	2	1	3	0	0	0
4:30 PM	4	0	4	0	0	0	4	0	4	4	0	4
4:45 PM	1	1	2	0	0	0	3	0	3	3	1	4
5:00 PM	5	2	7	4	0	4	2	1	3	2	0	2
5:15 PM	1	2	3	1	0	1	2	0	2	2	1	3
5:30 PM	0	2	2	0	3	3	0	1	1	3	2	5
5:45 PM	2	0	2	2	6	8	3	4	7	5	4	9
6:00 PM	1	6	7	2	1	3	2	6	8	3	1	4
6:15 PM	1	2	3	0	0	0	4	1	5	1	3	4

All Traffic Data Services

14 WELLESLEY DR & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	21	0	0	0	1	24	0	0	0	0	0	1	0	0	0	0	1	0	48	258
6:15 AM	0	0	20	0	0	0	0	32	1	0	0	1	0	0	0	0	0	0	0	0	54	284
6:30 AM	1	0	27	1	0	0	2	38	1	0	0	0	2	1	0	0	0	0	1	0	74	345
6:45 AM	0	0	36	1	0	0	1	39	0	0	0	2	1	1	0	0	0	1	0	0	82	395
7:00 AM	1	0	29	1	0	0	4	33	0	0	0	0	2	0	0	0	3	1	0	0	74	450
7:15 AM	1	0	53	1	0	0	2	44	0	0	0	0	5	1	0	0	1	5	2	0	115	507
7:30 AM	0	1	43	0	0	0	3	65	1	0	0	1	3	2	0	0	2	3	0	0	124	526
7:45 AM	2	0	50	0	0	1	2	73	0	0	0	0	3	2	0	0	1	2	1	0	137	549
8:00 AM	1	0	62	3	0	0	1	56	0	0	0	0	2	1	0	0	3	1	1	0	131	599
8:15 AM	3	1	61	4	0	2	2	49	0	0	0	3	3	1	0	0	4	1	0	0	134	0
8:30 AM	5	4	58	2	0	0	3	63	1	0	0	2	1	0	0	0	2	6	0	0	147	0
8:45 AM	3	1	71	2	0	0	3	94	2	0	0	2	2	4	0	0	2	1	0	0	187	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Lights	12	6	232	11	0	2	9	244	3	0	0	5	8	6	0	0	11	9	1	0	559
Mediums	0	0	20	0	0	0	0	17	0	0	0	1	0	0	0	0	0	0	0	0	38
Total	12	6	252	11	0	2	9	262	3	0	0	7	8	6	0	0	11	9	1	0	599
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	3
Bicycles on Crosswalk			0					3					3					1			7
Heavy Vehicle Percentage			0.0%					0.4%					4.8%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.91					0.70					0.66					0.69			0.80
Peak Hour Factor (PHF)	0.60	0.38	0.89	0.69	0.00	0.38	0.69	0.70	0.38	0.00	0.00	0.58	0.65	0.38	0.00	0.00	0.69	0.55	0.50	0.00	0.80

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	0	19	0	0	0	1	23	0	0	0	0	0	0	0	0	0	0	1	0	44
6:15 AM	0	0	17	0	0	0	0	27	1	0	0	1	0	0	0	0	0	0	0	0	46
6:30 AM	1	0	24	1	0	0	2	35	0	0	0	0	2	1	0	0	0	0	1	0	67
6:45 AM	0	0	33	1	0	0	1	37	0	0	0	2	1	1	0	0	0	1	0	0	77
7:00 AM	1	0	27	1	0	0	4	31	0	0	0	0	2	0	0	0	3	1	0	0	70
7:15 AM	1	0	49	1	0	0	2	38	0	0	0	0	5	1	0	0	0	5	2	0	104
7:30 AM	0	1	38	0	0	0	3	60	1	0	0	1	3	2	0	0	2	3	0	0	114
7:45 AM	2	0	49	0	0	1	2	70	0	0	0	0	3	2	0	0	1	2	1	0	133
8:00 AM	1	0	57	3	0	0	1	50	0	0	0	0	2	1	0	0	3	1	1	0	120
8:15 AM	3	1	57	4	0	2	2	45	0	0	0	3	3	1	0	0	4	1	0	0	126
8:30 AM	5	4	54	2	0	0	3	59	1	0	0	2	1	0	0	0	2	6	0	0	139
8:45 AM	3	1	64	2	0	0	3	90	2	0	0	0	2	4	0	0	2	1	0	0	174
Mediums																					
6:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
6:30 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
6:45 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
7:30 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
7:45 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
8:15 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
8:45 AM	0	0	7	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	12
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	2	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	0	2	2	0	2	0	0	0
7:45 AM	0	0	0	1	0	1	1	0	1	0	0	0
8:00 AM	0	0	0	1	0	1	1	0	1	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	2	0	2	2	0	2	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	1	2	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	2	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	1	0	0	0	0	0	0	0	1	1
7:45 AM	0	1	1	0	0	0	0	0	0	2	4	6
8:00 AM	0	0	0	0	0	0	0	0	0	3	1	4
8:15 AM	0	2	2	0	0	0	1	4	5	3	0	3
8:30 AM	1	0	1	0	0	0	0	0	0	2	3	5
8:45 AM	2	0	2	0	0	0	0	0	0	0	0	0

All Traffic Data Services

14 WELLESLEY DR & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	2	4	97	4	0	1	6	103	1	0	0	3	2	4	0	0	2	4	2	0	235	1,077
11:15 AM	5	6	96	4	0	2	5	135	4	0	0	2	1	4	0	0	5	1	1	0	271	1,137
11:30 AM	4	1	103	9	0	1	5	150	0	0	0	1	2	3	0	0	2	2	5	0	288	1,141
11:45 AM	0	4	112	5	0	0	3	140	3	0	0	2	1	2	0	0	1	4	6	0	283	1,097
12:00 PM	2	6	114	11	0	2	5	135	2	0	0	4	0	4	0	0	4	2	4	0	295	1,069
12:15 PM	2	4	112	4	0	1	5	119	7	0	0	4	2	3	0	0	5	3	4	0	275	1,026
12:30 PM	0	1	105	4	0	1	3	110	2	0	0	2	3	2	0	0	6	1	4	0	244	1,031
12:45 PM	2	3	103	7	0	1	5	105	9	0	0	4	3	5	0	0	3	3	2	0	255	1,032
1:00 PM	1	1	110	2	0	0	6	110	7	0	0	2	2	2	0	0	3	3	3	0	252	1,035
1:15 PM	2	4	115	4	0	0	2	126	4	0	0	2	2	1	0	0	6	6	6	0	280	0
1:30 PM	6	3	111	6	0	0	4	99	3	0	0	3	0	3	0	0	2	1	4	0	245	0
1:45 PM	3	3	105	5	0	1	2	120	2	0	0	2	1	4	0	0	1	5	4	0	258	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	8	15	427	28	0	4	17	522	12	0	0	11	5	12	0	0	12	11	18	0	1,102
Mediums	0	0	14	1	0	0	1	22	0	0	0	0	0	0	0	0	0	0	1	0	39
Total	8	15	441	29	0	4	18	544	12	0	0	11	5	12	0	0	12	11	19	0	1,141
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Bicycles on Crosswalk			3					0					2					2			7
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.93					0.95					0.75					0.64			0.97
Peak Hour Factor (PHF)	0.50	0.71	0.97	0.66	0.00	0.63	0.79	0.93	0.69	0.00	0.00	0.88	0.83	0.70	0.00	0.00	0.75	0.63	0.79	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	2	4	92	4	0	1	5	103	1	0	0	3	2	4	0	0	2	4	2	0	229
11:15 AM	5	5	92	4	0	2	5	129	4	0	0	2	1	3	0	0	5	1	1	0	259
11:30 AM	4	1	98	8	0	1	5	146	0	0	0	1	2	3	0	0	2	2	5	0	278
11:45 AM	0	4	110	5	0	0	2	135	3	0	0	2	1	2	0	0	1	4	5	0	274
12:00 PM	2	6	110	11	0	2	5	129	2	0	0	4	0	4	0	0	4	2	4	0	285
12:15 PM	2	4	109	4	0	1	5	112	7	0	0	4	2	3	0	0	5	3	4	0	265
12:30 PM	0	1	101	4	0	1	3	103	2	0	0	2	3	2	0	0	6	1	4	0	233
12:45 PM	2	3	100	7	0	1	5	96	9	0	0	4	3	5	0	0	3	3	2	0	243
1:00 PM	1	1	105	2	0	0	6	105	7	0	0	2	2	2	0	0	3	3	3	0	242
1:15 PM	2	4	113	4	0	0	1	118	4	0	0	2	2	1	0	0	6	6	6	0	269
1:30 PM	6	3	106	6	0	0	4	96	3	0	0	3	0	3	0	0	2	1	4	0	237
1:45 PM	3	3	102	4	0	1	2	113	2	0	0	2	1	4	0	0	1	5	4	0	247
Mediums																					
11:00 AM	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
11:15 AM	0	1	4	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	11
11:30 AM	0	0	5	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10
11:45 AM	0	0	2	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	1	0	9
12:00 PM	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	10
12:15 PM	0	0	3	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	10
12:30 PM	0	0	4	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11
12:45 PM	0	0	3	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	12
1:00 PM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
1:15 PM	0	0	2	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	11
1:30 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
1:45 PM	0	0	3	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	1	0	1	1	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	1	0	1	0	0	0	1	0	1	0	0	0
12:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:15 PM	0	1	1	0	0	0	1	0	1	0	1	1
12:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	1	1	2	0	0	0	2	1	3	1	0	1
1:45 PM	0	0	0	0	0	0	1	1	2	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	20	1	21	0	0	0	20	0	20	3	2	5
11:15 AM	1	0	1	0	1	1	3	2	5	3	7	10
11:30 AM	3	2	5	0	1	1	1	6	7	5	5	10
11:45 AM	0	2	2	0	0	0	1	3	4	3	5	8
12:00 PM	2	2	4	0	0	0	3	8	11	8	3	11
12:15 PM	0	1	1	0	0	0	6	8	14	12	7	19
12:30 PM	2	2	4	0	0	0	3	4	7	4	5	9
12:45 PM	0	3	3	0	0	0	8	5	13	1	11	12
1:00 PM	2	3	5	0	0	0	7	3	10	2	6	8
1:15 PM	2	1	3	0	0	0	1	6	7	2	2	4
1:30 PM	5	3	8	0	0	0	6	2	8	2	2	4
1:45 PM	0	2	2	0	0	0	0	2	2	3	1	4

All Traffic Data Services

14 WELLESLEY DR & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	1	6	95	2	0	0	4	110	8	0	0	4	0	5	0	0	2	4	5	0	246	1,033
3:45 PM	1	8	111	3	0	0	3	108	7	0	0	1	4	4	0	0	1	3	7	0	261	1,017
4:00 PM	1	2	111	2	0	0	1	127	8	0	0	2	2	5	0	0	3	6	3	0	273	1,020
4:15 PM	0	4	114	6	0	1	4	105	7	0	0	1	2	2	0	0	1	5	1	0	253	1,008
4:30 PM	2	3	106	4	0	0	5	90	0	0	0	3	4	5	0	0	3	3	2	0	230	1,054
4:45 PM	2	0	118	11	0	1	5	94	5	0	0	3	5	3	0	0	4	10	3	0	264	1,093
5:00 PM	5	2	98	3	0	0	5	116	5	0	0	0	3	9	0	0	5	7	3	0	261	1,116
5:15 PM	5	4	142	16	0	1	7	101	4	0	0	3	4	2	0	0	2	2	6	0	299	1,115
5:30 PM	3	2	108	9	0	0	4	112	7	0	0	2	3	3	0	0	3	8	5	0	269	1,087
5:45 PM	2	8	105	17	0	0	7	125	3	0	0	4	1	7	0	0	2	3	3	0	287	0
6:00 PM	4	1	113	10	0	0	9	96	2	0	0	2	1	4	0	0	3	9	6	0	260	0
6:15 PM	0	1	122	9	0	0	14	99	6	0	0	1	2	5	0	0	2	6	4	0	271	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	15	16	442	44	0	1	23	443	19	0	0	9	11	20	0	0	12	20	17	0	1,092
Mediums	0	0	11	1	0	0	0	11	0	0	0	0	0	1	0	0	0	0	0	0	24
Total	15	16	453	45	0	1	23	454	19	0	0	9	11	21	0	0	12	20	17	0	1,116
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
Bicycles on Crosswalk			0					0					3					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.82					0.92					0.92					0.85			0.93
Peak Hour Factor (PHF)	0.75	0.63	0.82	0.76	0.00	0.50	0.61	0.91	0.94	0.00	0.00	0.69	0.80	0.58	0.00	0.00	0.70	0.68	0.83	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	1	6	92	2	0	0	4	106	8	0	0	4	0	5	0	0	2	4	4	0	238
3:45 PM	1	8	106	3	0	0	3	104	7	0	0	1	4	4	0	0	1	3	7	0	252
4:00 PM	1	2	109	2	0	0	1	124	8	0	0	2	2	5	0	0	3	6	3	0	268
4:15 PM	0	4	110	6	0	1	4	101	7	0	0	1	1	2	0	0	1	5	1	0	244
4:30 PM	2	3	104	4	0	0	5	85	0	0	0	3	4	5	0	0	3	3	2	0	223
4:45 PM	2	0	115	11	0	1	5	90	5	0	0	3	5	3	0	0	4	10	3	0	257
5:00 PM	5	2	94	2	0	0	5	113	5	0	0	0	3	9	0	0	5	7	3	0	253
5:15 PM	5	4	141	16	0	1	7	99	4	0	0	3	4	1	0	0	2	2	6	0	295
5:30 PM	3	2	104	9	0	0	4	110	7	0	0	2	3	3	0	0	3	8	5	0	263
5:45 PM	2	8	103	17	0	0	7	121	3	0	0	4	1	7	0	0	2	3	3	0	281
6:00 PM	4	1	112	10	0	0	9	94	2	0	0	2	1	4	0	0	3	9	6	0	257
6:15 PM	0	1	120	9	0	0	14	97	6	0	0	1	2	5	0	0	2	6	4	0	267
Mediums																					
3:30 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	8
3:45 PM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:15 PM	0	0	3	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	8
4:30 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
4:45 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	0	4	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
5:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	4
5:30 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
6:00 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
3:30 PM	0	0	1	0	0	0	1	0	2	0	0	0	0	1	0	0	0	0	0	0	5
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
3:45 PM	0	1	1	0	0	0	0	0	0	0	1	1
4:00 PM	1	0	1	0	0	0	1	1	2	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:30 PM	1	1	2	0	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:00 PM	0	0	0	0	0	0	1	2	3	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	1	1	2
6:15 PM	1	0	1	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	1	2	0	0	0	4	1	5	12	8	20
3:45 PM	2	2	4	0	0	0	10	2	12	4	4	8
4:00 PM	0	0	0	0	1	1	4	5	9	1	3	4
4:15 PM	0	0	0	0	0	0	4	11	15	0	0	0
4:30 PM	2	6	8	0	0	0	8	5	13	3	4	7
4:45 PM	2	0	2	1	0	1	4	9	13	8	1	9
5:00 PM	3	1	4	0	0	0	3	4	7	13	10	23
5:15 PM	1	1	2	0	0	0	1	2	3	4	2	6
5:30 PM	5	1	6	0	0	0	7	3	10	5	2	7
5:45 PM	5	0	5	0	0	0	4	7	11	9	11	20
6:00 PM	2	2	4	0	0	0	4	14	18	7	4	11
6:15 PM	5	4	9	0	0	0	2	2	4	17	6	23

All Traffic Data Services

15 RICHMOND DR & CENTRAL AVE AM
Tuesday, June 4, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					RICHMOND DR					RICHMOND DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	1	23	0	0	0	1	20	0	0	0	0	2	0	0	0	0	0	0	0	47	274
6:15 AM	0	0	29	3	0	0	0	28	0	0	0	0	3	0	0	0	0	0	0	0	63	325
6:30 AM	0	0	29	0	0	2	0	42	0	0	0	0	0	0	0	0	0	1	0	0	74	368
6:45 AM	0	0	35	0	0	2	3	46	0	0	0	1	1	0	0	0	0	2	0	0	90	431
7:00 AM	1	0	52	0	0	1	1	35	0	0	0	0	2	1	0	0	0	4	1	0	98	453
7:15 AM	1	0	42	1	0	0	1	52	2	0	0	0	2	0	0	0	0	5	0	0	106	494
7:30 AM	1	1	58	2	0	0	2	63	0	0	0	0	6	1	0	0	0	2	1	0	137	522
7:45 AM	0	0	41	5	0	0	0	53	5	0	0	1	3	1	0	0	0	3	0	0	112	536
8:00 AM	1	2	53	5	0	1	2	62	2	0	0	2	4	2	0	0	1	1	1	0	139	571
8:15 AM	0	0	71	0	0	0	4	51	0	0	0	0	3	0	0	0	1	3	1	0	134	0
8:30 AM	0	2	70	7	0	1	2	49	2	0	0	4	3	0	0	0	0	11	0	0	151	0
8:45 AM	2	0	56	11	0	1	2	52	3	0	0	2	4	1	0	0	0	13	0	0	147	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	3	4	237	23	0	3	8	195	6	0	0	8	14	3	0	0	2	28	2	0	536
Mediums	0	0	13	0	0	0	2	18	1	0	0	0	0	0	0	0	0	0	0	0	34
Total	3	4	250	23	0	3	10	214	7	0	0	8	14	3	0	0	2	28	2	0	571
Bicycles on Road	0	0	1	0	0	0	0	1	0	0	0	0	4	0	0	0	0	3	0	0	9
Bicycles on Crosswalk			0					3					0					0			3
Heavy Vehicle Percentage			0.0%					0.4%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.89					0.91					0.78					0.62			0.95
Peak Hour Factor (PHF)	0.38	0.50	0.88	0.52	0.00	0.63	0.63	0.91	0.45	0.00	0.00	0.50	0.67	0.50	0.00	0.00	0.50	0.54	0.75	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	21	0	0	0	1	18	0	0	0	0	2	0	0	0	0	0	0	0	43
6:15 AM	0	0	26	3	0	0	0	24	0	0	0	0	3	0	0	0	0	0	0	0	56
6:30 AM	0	0	27	0	0	2	0	40	0	0	0	0	0	0	0	0	0	1	0	0	70
6:45 AM	0	0	32	0	0	2	3	43	0	0	0	1	1	0	0	0	0	2	0	0	84
7:00 AM	1	0	51	0	0	1	1	34	0	0	0	0	2	0	0	0	0	4	1	0	95
7:15 AM	1	0	40	1	0	0	1	47	2	0	0	0	2	0	0	0	0	5	0	0	99
7:30 AM	1	1	51	2	0	0	2	59	0	0	0	0	6	1	0	0	0	2	1	0	126
7:45 AM	0	0	35	5	0	0	0	51	5	0	0	1	3	1	0	0	0	3	0	0	104
8:00 AM	1	2	51	5	0	1	2	56	2	0	0	2	4	2	0	0	1	1	1	0	131
8:15 AM	0	0	66	0	0	0	2	46	0	0	0	0	3	0	0	0	1	3	1	0	122
8:30 AM	0	2	67	7	0	1	2	44	1	0	0	4	3	0	0	0	0	11	0	0	142
8:45 AM	2	0	53	11	0	1	2	49	3	0	0	2	4	1	0	0	0	13	0	0	141
Mediums																					
6:00 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
6:30 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
6:45 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3
7:15 AM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
7:30 AM	0	0	7	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11
7:45 AM	0	0	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	7
8:00 AM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
8:15 AM	0	0	5	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	12
8:30 AM	0	0	3	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	8
8:45 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	1	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	0	0	1	0	1
6:15 AM	0	0	0	0	1	1	1	0	1	2	1	3
6:30 AM	0	0	0	0	0	0	2	1	3	2	0	2
6:45 AM	0	1	1	0	0	0	0	2	2	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	1	0	1	2	5	7
7:30 AM	0	0	0	0	0	0	1	1	2	0	1	1
7:45 AM	0	0	0	0	1	1	2	0	2	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	1	1	0	1
8:15 AM	0	0	0	1	0	1	1	1	2	1	2	3
8:30 AM	0	0	0	1	0	1	2	1	3	1	1	2
8:45 AM	0	0	0	0	1	1	2	1	3	3	0	3

All Traffic Data Services

15 RICHMOND DR & CENTRAL AVE Noon
Tuesday, June 4, 2024

Peak Hour
01:00 PM - 02:00 PM
Peak 15-Minutes
01:45 PM - 02:00 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					RICHMOND DR					RICHMOND DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	3	96	1	0	1	6	92	0	0	1	3	7	5	0	0	0	3	1	0	219	940
11:15 AM	2	6	100	4	0	1	4	74	6	0	0	2	5	5	0	0	0	8	2	0	219	976
11:30 AM	1	8	98	2	0	2	2	86	5	0	0	5	4	4	0	0	2	5	6	0	230	1,013
11:45 AM	4	6	117	11	0	0	5	100	2	0	0	4	5	3	0	0	3	10	2	0	272	1,051
12:00 PM	3	1	124	5	0	3	10	81	2	0	0	3	3	7	0	0	1	8	4	0	255	1,028
12:15 PM	1	4	109	7	0	1	5	115	0	0	0	3	2	2	0	0	1	6	0	0	256	1,034
12:30 PM	2	4	111	8	0	1	0	107	2	0	0	4	7	7	0	0	7	6	2	0	268	1,050
12:45 PM	2	3	107	7	0	1	5	105	3	0	0	6	4	2	0	0	1	3	0	0	249	1,049
1:00 PM	1	4	130	10	0	2	1	99	1	0	0	3	1	1	0	0	2	5	1	0	261	1,076
1:15 PM	2	8	118	5	0	1	6	108	7	0	0	2	3	2	0	0	3	5	2	0	272	0
1:30 PM	0	4	111	7	0	1	6	114	4	0	0	3	4	4	0	0	3	3	3	0	267	0
1:45 PM	1	2	130	6	0	0	7	110	3	0	0	2	1	2	0	0	2	6	4	0	276	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	4	18	470	28	0	4	20	406	15	0	0	10	9	9	0	0	9	19	10	0	1,031
Mediums	0	0	19	0	0	0	0	24	0	0	0	0	0	0	0	0	1	0	0	0	44
Total	4	18	489	28	0	4	20	431	15	0	0	10	9	9	0	0	10	19	10	0	1,076
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					2					3			5
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.93					0.94					0.83					0.85			0.97
Peak Hour Factor (PHF)	0.63	0.72	0.94	0.80	0.00	0.50	0.55	0.95	0.54	0.00	0.25	0.67	0.75	0.68	0.00	0.00	0.46	0.78	0.58	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	3	93	1	0	1	6	87	0	0	1	2	7	5	0	0	0	3	1	0	210
11:15 AM	2	6	93	4	0	1	4	70	6	0	0	2	5	5	0	0	0	7	2	0	207
11:30 AM	1	8	93	2	0	2	2	78	5	0	0	5	4	4	0	0	2	5	6	0	217
11:45 AM	4	6	114	11	0	0	5	92	2	0	0	2	5	3	0	0	3	10	2	0	259
12:00 PM	3	1	120	5	0	3	10	75	2	0	0	3	3	7	0	0	1	8	4	0	245
12:15 PM	1	3	100	6	0	1	5	110	0	0	0	3	2	1	0	0	1	6	0	0	239
12:30 PM	2	4	107	8	0	1	0	103	2	0	0	4	7	7	0	0	7	6	2	0	260
12:45 PM	2	3	105	7	0	1	5	99	3	0	0	6	4	2	0	0	1	3	0	0	241
1:00 PM	1	4	126	10	0	2	1	91	1	0	0	3	1	1	0	0	2	5	1	0	249
1:15 PM	2	8	113	5	0	1	6	103	7	0	0	2	3	2	0	0	2	5	2	0	261
1:30 PM	0	4	106	7	0	1	6	108	4	0	0	3	4	4	0	0	3	3	3	0	256
1:45 PM	1	2	125	6	0	0	7	104	3	0	0	2	1	2	0	0	2	6	4	0	265
Mediums																					
11:00 AM	0	0	1	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	7
11:15 AM	0	0	7	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	12
11:30 AM	0	0	5	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	13
11:45 AM	0	0	3	0	0	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	12
12:00 PM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
12:15 PM	0	0	8	1	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	14
12:30 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
12:45 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
1:00 PM	0	0	4	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	12
1:15 PM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	11
1:30 PM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
1:45 PM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
11:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	1	1	2	1	0	1
11:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	1	1	2	3	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	1	1	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	1	1	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	2	2	1	2	3
11:15 AM	0	1	1	0	3	3	3	2	5	5	1	6
11:30 AM	0	0	0	0	0	0	4	4	8	1	3	4
11:45 AM	0	0	0	0	0	0	3	5	8	2	1	3
12:00 PM	0	0	0	0	0	0	3	3	6	5	2	7
12:15 PM	0	0	0	0	2	2	6	8	14	1	2	3
12:30 PM	0	0	0	3	0	3	5	2	7	4	2	6
12:45 PM	0	5	5	0	1	1	3	4	7	1	1	2
1:00 PM	0	0	0	1	0	1	4	2	6	0	2	2
1:15 PM	1	0	1	1	4	5	7	8	15	1	5	6
1:30 PM	1	0	1	2	0	2	9	4	13	2	0	2
1:45 PM	0	0	0	0	0	0	1	3	4	3	3	6

All Traffic Data Services

15 RICHMOND DR & CENTRAL AVE PM
Tuesday, June 4, 2024

Peak Hour
04:00 PM - 05:00 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					RICHMOND DR					RICHMOND DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	2	108	4	0	1	5	111	4	0	0	4	3	2	0	0	0	7	4	0	255	1,054
3:45 PM	3	1	103	5	0	1	1	128	1	0	0	0	8	3	0	0	2	9	1	0	266	1,081
4:00 PM	2	2	119	8	0	1	3	113	0	0	0	2	8	3	0	0	2	9	0	0	272	1,088
4:15 PM	3	3	111	11	0	0	2	103	1	0	0	3	7	5	0	0	0	10	2	0	261	1,061
4:30 PM	2	7	137	7	0	0	5	94	3	0	0	4	4	4	0	0	1	11	3	0	282	1,076
4:45 PM	1	2	115	8	0	5	4	103	3	0	0	6	9	3	0	0	1	12	1	0	273	1,015
5:00 PM	3	5	109	5	0	0	4	98	0	0	0	3	5	2	0	0	3	8	0	0	245	967
5:15 PM	3	3	122	6	0	1	4	103	3	0	0	3	6	2	0	0	3	16	1	0	276	941
5:30 PM	1	3	97	9	0	1	5	79	3	0	0	3	4	6	0	0	2	5	3	0	221	893
5:45 PM	2	0	99	6	0	3	2	92	3	0	0	2	4	4	0	0	1	5	2	0	225	0
6:00 PM	1	2	78	5	0	1	2	104	0	0	0	5	7	3	0	0	5	3	3	0	219	0
6:15 PM	2	3	103	3	0	3	4	95	3	0	0	2	4	1	0	0	1	3	1	0	228	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	8	14	470	34	0	6	14	397	7	0	0	15	28	15	0	0	4	42	6	0	1,060
Mediums	0	0	11	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	27
Total	8	14	482	34	0	6	14	413	7	0	0	15	28	15	0	0	4	42	6	0	1,088
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Bicycles on Crosswalk			0					0					2					3			5
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.88					0.91					0.81					0.75			0.96
Peak Hour Factor (PHF)	0.83	0.61	0.88	0.77	0.00	0.67	0.85	0.89	0.75	0.00	0.00	0.67	0.78	0.63	0.00	0.00	0.55	0.73	0.75	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	2	101	4	0	1	5	109	3	0	0	4	3	2	0	0	0	7	4	0	245
3:45 PM	3	1	101	5	0	1	1	125	1	0	0	0	8	3	0	0	2	9	1	0	261
4:00 PM	2	2	117	8	0	1	3	110	0	0	0	2	8	3	0	0	2	9	0	0	267
4:15 PM	3	3	108	11	0	0	2	99	1	0	0	3	7	5	0	0	0	10	2	0	254
4:30 PM	2	7	134	7	0	0	5	87	3	0	0	4	4	4	0	0	1	11	3	0	272
4:45 PM	1	2	111	8	0	5	4	101	3	0	0	6	9	3	0	0	1	12	1	0	267
5:00 PM	3	5	105	5	0	0	4	94	0	0	0	3	5	2	0	0	3	8	0	0	237
5:15 PM	3	3	121	6	0	1	4	101	3	0	0	3	6	2	0	0	3	16	1	0	273
5:30 PM	1	3	94	9	0	1	5	76	3	0	0	3	4	6	0	0	2	5	3	0	215
5:45 PM	2	0	97	6	0	3	2	90	3	0	0	2	4	4	0	0	1	5	2	0	221
6:00 PM	1	2	75	5	0	1	2	103	0	0	0	5	7	3	0	0	5	3	3	0	215
6:15 PM	2	3	100	3	0	3	4	91	3	0	0	2	4	1	0	0	1	3	1	0	221
Mediums																					
3:30 PM	0	0	7	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	10
3:45 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:00 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:15 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
4:30 PM	0	0	3	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	10
4:45 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
5:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
6:00 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	3
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
3:45 PM	0	0	0	0	0	0	0	2	2	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	1	2	0	2
4:45 PM	0	0	0	0	0	0	1	0	1	0	1	1
5:00 PM	0	0	0	1	1	2	0	1	1	0	0	0
5:15 PM	1	0	1	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	1	1	0	0	0	1	1	2
5:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	2	3	5	1	0	1	4	5	9	4	3	7
3:45 PM	3	1	4	0	0	0	8	0	8	2	1	3
4:00 PM	0	0	0	0	0	0	1	2	3	5	5	10
4:15 PM	0	0	0	0	0	0	1	3	4	0	0	0
4:30 PM	0	0	0	0	0	0	4	0	4	1	1	2
4:45 PM	1	2	3	0	1	1	2	7	9	4	3	7
5:00 PM	3	1	4	0	0	0	2	4	6	4	4	8
5:15 PM	0	0	0	1	0	1	6	0	6	0	5	5
5:30 PM	0	0	0	3	2	5	2	2	4	4	2	6
5:45 PM	0	0	0	0	0	0	2	5	7	1	1	2
6:00 PM	0	0	0	0	0	0	2	0	2	1	0	1
6:15 PM	0	1	1	0	0	0	1	1	2	1	1	2

All Traffic Data Services

16 GIRARD BLVD & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE						GIRARD BLVD						CENTRAL AVE						GIRARD BLVD						MONTE VISTA BLVD							
	Westbound						Northbound						Eastbound						Southbound						Southwestbound							Rolling
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total	Hour
6:00 AM	0	0	24	1	0	0	0	0	4	3	2	0	0	0	1	19	0	0	0	0	6	12	0	0	0	0	0	3	0	0	75	456
6:15 AM	0	0	26	1	0	0	0	2	11	1	0	0	0	0	4	24	1	0	0	0	1	9	1	0	0	0	0	10	0	0	91	537
6:30 AM	0	2	37	1	1	0	0	1	19	4	1	0	0	1	12	26	0	0	0	0	3	8	6	0	1	0	0	10	0	0	133	686
6:45 AM	0	2	38	0	0	0	0	4	24	2	2	0	0	3	11	31	4	0	0	0	2	23	4	0	0	0	0	7	0	0	157	808
7:00 AM	0	0	29	2	0	0	0	2	22	14	0	0	0	1	8	33	3	0	0	0	1	21	9	0	0	0	1	10	0	0	156	939
7:15 AM	0	8	31	5	0	0	0	2	40	14	5	0	0	0	27	41	2	0	0	0	4	27	6	0	0	0	1	25	2	0	240	1,056
7:30 AM	0	2	50	4	0	0	0	6	37	8	2	0	0	2	20	43	2	0	0	0	4	33	13	0	0	0	0	27	2	0	255	1,093
7:45 AM	1	4	63	4	0	0	0	9	34	12	2	0	0	2	23	45	4	0	0	1	5	52	4	0	0	0	0	22	1	0	288	1,126
8:00 AM	0	3	48	7	0	0	0	7	40	10	3	0	0	0	15	58	8	0	0	0	10	38	9	0	0	0	1	15	1	0	273	1,135
8:15 AM	1	5	40	2	1	0	0	7	44	15	3	0	0	0	23	69	4	0	0	0	8	29	5	0	0	0	0	18	3	0	277	0
8:30 AM	0	5	56	0	0	0	0	3	35	20	2	0	0	1	24	60	7	0	0	0	10	37	4	0	0	0	0	21	3	0	288	0
8:45 AM	2	5	65	4	0	0	0	1	29	11	5	0	0	3	19	65	7	0	0	1	7	36	14	0	0	0	0	22	1	0	297	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Vehicle Type	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
Lights	3	16	195	13	1	0	0	17	147	55	11	0	0	4	79	236	26	0	0	1	34	138	31	0	0	0	1	75	7	0	1,090
Mediums	0	2	13	0	0	0	0	1	1	1	2	0	0	0	2	16	0	0	0	0	0	2	1	0	0	0	0	1	0	0	42
Total	3	18	209	13	1	0	0	18	148	56	13	0	0	4	81	252	26	0	0	1	35	140	32	0	0	0	1	76	8	0	1,135
Bicycles on Road	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	4
Bicycles on Crosswalk			0						0						1						2						0				3
Heavy Vehicle Percentage			0.4%						0.0%						0.0%						0.5%						1.2%				0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.3%
Peak Hour Factor (PHF)			0.80						0.89						0.95						0.85						0.84				0.96
Peak Hour Factor (PHF)	0.38	0.90	0.80	0.71	0.25	0.00	0.00	0.81	0.88	0.71	0.65	0.00	0.00	0.50	0.79	0.91	0.81	0.00	0.00	0.25	0.88	0.75	0.57	0.00	0.25	0.00	0.50	0.82	0.67	0.00	0.96

Traffic Counts by Vehicle Type

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks																															
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																															
6:00 AM	0	0	23	1	0	0	0	0	4	3	2	0	0	0	1	17	0	0	0	0	6	12	0	0	0	0	0	3	0	0	72
6:15 AM	0	0	22	1	0	0	0	2	11	1	0	0	0	0	4	21	1	0	0	0	1	9	1	0	0	0	0	10	0	0	84
6:30 AM	0	1	34	1	1	0	0	1	19	3	0	0	0	1	11	24	0	0	0	0	3	8	5	0	1	0	0	10	0	0	123
6:45 AM	0	2	36	0	0	0	0	4	24	2	2	0	0	3	11	29	4	0	0	0	2	22	4	0	0	0	0	7	0	0	152
7:00 AM	0	0	27	2	0	0	0	2	22	14	0	0	0	1	6	31	2	0	0	0	1	21	9	0	0	0	1	9	0	0	148
7:15 AM	0	7	28	5	0	0	0	2	39	14	3	0	0	0	26	39	2	0	0	0	3	26	5	0	0	0	1	25	2	0	227
7:30 AM	0	1	46	4	0	0	0	6	36	8	2	0	0	2	20	39	2	0	0	0	4	31	12	0	0	0	0	27	2	0	242
7:45 AM	1	4	60	4	0	0	0	9	34	12	1	0	0	2	22	41	4	0	0	1	5	50	4	0	0	0	0	20	1	0	275
8:00 AM	0	1	44	7	0	0	0	6	40	10	2	0	0	0	15	55	8	0	0	0	10	37	9	0	0	0	1	15	1	0	261
8:15 AM	1	5	37	2	1	0	0	7	44	15	3	0	0	0	23	65	4	0	0	0	8	28	5	0	0	0	0	18	2	0	268
8:30 AM	0	5	52	0	0	0	0	3	34	20	2	0	0	1	24	56	7	0	0	0	9	37	4	0	0	0	0	21	3	0	278
8:45 AM	2	5	62	4	0	0	0	1	29	10	4	0	0	3	17	60	7	0	0	1	7	36	13	0	0	0	0	21	1	0	283
Mediums																															
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6:30 AM	0	1	3	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	8
7:15 AM	0	1	3	0	0	0	0	0	1	0	2	0	0	0	1	2	0	0	0	0	1	1	1	0	0	0	0	0	0	0	13
7:30 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	1	0	0	0	0	0	0	0	11
7:45 AM	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	4	0	0	0	0	0	2	0	0	0	0	0	2	0	0	13
8:00 AM	0	2	4	0	0	0	0	1	0	0	1	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12
8:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8:45 AM	0	0	3	0	0	0	0	0	0	1	1	0	0	0	2	5	0	0	0	0	0	0	1	0	0	0	0	1	0	0	14
Bicycles on Road																															
6:00 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	1	0	1	1	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0

Pedestrians

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	1	1	0	0	0	1	0	1	0	0	0
6:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
7:00 AM	1	0	1	1	1	2	0	0	0	0	0	0	1	0	1
7:15 AM	1	0	1	1	1	2	0	0	0	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	0	1	1	0	0	0	0	1	1
7:45 AM	0	0	0	2	2	4	2	0	2	2	0	2	0	0	0
8:00 AM	0	0	0	0	2	2	0	0	0	2	1	3	1	2	3
8:15 AM	0	0	0	0	1	1	1	1	2	2	1	3	4	0	4
8:30 AM	0	0	0	0	2	2	0	3	3	1	0	1	0	0	0
8:45 AM	0	1	1	0	0	0	0	0	0	0	2	2	0	3	3

All Traffic Data Services

16 GIRARD BLVD & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	CENTRAL AVE						GIRARD BLVD						CENTRAL AVE						GIRARD BLVD						MONTE VISTA BLVD							
	Westbound						Northbound						Eastbound						Southbound						Southwestbound							
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total	Rolling Hour
11:00 AM	1	7	90	2	0	0	0	6	31	10	5	0	0	0	25	94	9	0	0	0	21	36	6	0	0	0	4	20	5	0	372	1,679
11:15 AM	4	6	115	3	0	0	0	10	34	8	6	0	0	2	20	92	17	0	0	0	13	32	7	0	1	0	0	30	2	0	402	1,808
11:30 AM	1	9	120	5	0	0	0	17	21	15	6	0	0	1	33	93	29	0	0	0	10	34	11	0	0	0	0	31	4	0	440	1,849
11:45 AM	2	15	110	16	0	0	0	9	27	10	10	0	0	2	32	91	20	0	0	0	17	52	14	0	0	0	0	34	4	0	465	1,838
12:00 PM	1	10	112	3	0	0	0	7	52	10	7	0	1	0	42	99	25	0	1	0	24	48	16	0	0	0	0	35	8	0	501	1,805
12:15 PM	3	8	109	6	0	0	0	9	29	12	9	0	0	5	33	101	17	0	0	0	14	34	20	0	1	0	0	27	6	0	443	1,715
12:30 PM	2	6	103	4	1	0	0	19	36	5	9	0	1	3	33	89	15	0	0	2	13	37	17	0	0	0	0	26	8	0	429	1,712
12:45 PM	2	3	85	6	0	0	0	17	28	16	9	0	0	2	35	105	18	0	0	0	15	38	12	0	0	0	1	38	2	0	432	1,679
1:00 PM	2	8	104	2	0	0	0	9	25	12	3	0	0	3	38	90	13	0	0	0	13	39	17	0	0	0	1	30	2	0	411	1,651
1:15 PM	2	8	106	10	1	0	0	9	41	11	9	0	0	0	42	107	13	0	0	0	16	28	14	0	0	0	0	23	0	0	440	0
1:30 PM	1	6	99	3	0	0	0	12	32	10	2	0	0	2	24	104	15	0	0	0	5	38	10	0	0	1	1	29	2	0	396	0
1:45 PM	2	9	99	8	0	0	0	6	40	15	7	0	0	2	32	84	18	0	0	0	14	33	10	0	0	0	0	22	3	0	404	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Vehicle Type	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	7	40	426	28	0	0	0	40	129	46	31	0	1	7	138	370	90	0	1	0	65	166	57	0	1	0	0	127	22	0	1,792
Mediums	0	2	24	2	0	0	0	2	0	1	1	0	0	1	1	14	1	0	0	0	0	2	4	0	0	0	0	0	0	0	55
Total	7	42	451	30	0	0	0	42	129	47	32	0	1	8	140	384	91	0	1	0	65	168	61	0	1	0	0	127	22	0	1,849
Bicycles on Road	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			0						4						2						3						2				11
Heavy Vehicle Percentage			0.2%						0.0%						0.2%						0.0%						0.0%				0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.93						0.90						0.93						0.87						0.88				0.92
Peak Hour Factor (PHF)	0.75	0.70	0.95	0.47	0.50	0.00	0.00	0.71	0.70	0.77	0.88	0.00	0.50	0.65	0.88	0.95	0.78	0.00	0.25	0.25	0.71	0.82	0.84	0.00	0.25	0.25	0.25	0.93	0.81	0.00	0.92

Traffic Counts by Vehicle Type

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks																															
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																															
11:00 AM	1	7	86	2	0	0	0	6	31	10	5	0	0	0	25	89	9	0	0	0	21	34	6	0	0	0	4	20	5	0	361
11:15 AM	4	6	110	3	0	0	0	10	34	8	5	0	0	2	19	89	16	0	0	0	13	32	7	0	1	0	0	29	2	0	390
11:30 AM	1	8	114	5	0	0	0	15	21	15	6	0	0	1	33	89	29	0	0	0	10	34	9	0	0	0	0	31	4	0	425
11:45 AM	2	15	103	14	0	0	0	9	27	10	10	0	0	1	32	89	20	0	0	0	17	52	13	0	0	0	0	34	4	0	452
12:00 PM	1	9	107	3	0	0	0	7	52	9	7	0	1	0	41	95	24	0	1	0	24	46	15	0	0	0	0	35	8	0	485
12:15 PM	3	8	102	6	0	0	0	9	29	12	8	0	0	5	32	97	17	0	0	0	14	34	20	0	1	0	0	27	6	0	430
12:30 PM	2	6	97	3	1	0	0	19	36	5	9	0	1	3	32	86	15	0	0	2	13	37	17	0	0	0	0	26	8	0	418
12:45 PM	2	3	76	6	0	0	0	16	28	16	9	0	0	1	35	102	18	0	0	0	15	38	10	0	0	0	1	38	2	0	416
1:00 PM	2	7	100	2	0	0	0	9	25	12	3	0	0	3	38	86	13	0	0	0	13	38	17	0	0	0	1	30	2	0	401
1:15 PM	2	7	98	10	1	0	0	9	40	11	9	0	0	0	42	104	13	0	0	0	16	28	14	0	0	0	0	22	0	0	426
1:30 PM	1	6	97	3	0	0	0	12	31	10	2	0	0	2	24	100	14	0	0	0	5	38	8	0	0	1	1	28	2	0	385
1:45 PM	2	8	93	8	0	0	0	5	40	15	6	0	0	2	32	82	17	0	0	0	14	33	10	0	0	0	0	22	3	0	392
Mediums																															
11:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	11
11:15 AM	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	10
11:30 AM	0	1	6	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	15
11:45 AM	0	0	6	2	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12
12:00 PM	0	1	5	0	0	0	0	0	0	1	0	0	0	0	1	4	1	0	0	0	0	2	1	0	0	0	0	0	0	0	16
12:15 PM	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
12:30 PM	0	0	6	1	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
12:45 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12
1:00 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	9
1:15 PM	0	1	8	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	14
1:30 PM	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	4	1	0	0	0	0	0	1	0	0	0	0	1	0	0	10
1:45 PM	0	1	6	0	0	0	0	1	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Bicycles on Road																															
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
1:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3

Bicycles on Crosswalk

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
12:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	2	0	2	1	0	1	1	0	1	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1:15 PM	0	0	0	0	0	0	0	1	1	1	1	2	1	0	1
1:30 PM	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0
1:45 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	2	3	5	0	3	3	0	2	2	0	2	2
11:15 AM	1	0	1	2	4	6	0	0	0	0	2	2	2	0	2
11:30 AM	1	0	1	0	0	0	0	0	0	0	2	2	0	2	2
11:45 AM	0	1	1	0	0	0	2	4	6	3	4	7	6	2	8
12:00 PM	1	0	1	2	1	3	4	3	7	2	1	3	4	1	5
12:15 PM	0	0	0	1	6	7	2	0	2	1	1	2	2	2	4
12:30 PM	0	0	0	2	3	5	2	1	3	2	2	4	2	2	4
12:45 PM	1	0	1	5	0	5	1	0	1	0	0	0	1	0	1
1:00 PM	0	0	0	0	2	2	2	2	4	3	1	4	1	1	2
1:15 PM	1	0	1	1	1	2	0	2	2	1	0	1	1	0	1
1:30 PM	0	0	0	4	1	5	1	0	1	3	0	3	4	0	4
1:45 PM	0	0	0	1	1	2	1	0	1	0	1	1	1	0	1

All Traffic Data Services

16 GIRARD BLVD & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE						GIRARD BLVD						CENTRAL AVE						GIRARD BLVD						MONTE VISTA BLVD							
	Westbound						Northbound						Eastbound						Southbound						Southwestbound							
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total	Rolling Hour
3:30 PM	0	7	109	11	0	0	0	12	31	17	7	0	0	3	38	88	14	0	0	0	8	50	17	0	1	0	3	37	4	0	457	1,829
3:45 PM	4	5	87	7	0	0	0	10	40	22	8	0	0	1	32	91	10	0	0	0	18	50	9	0	1	0	0	31	4	0	430	1,798
4:00 PM	1	6	108	7	0	0	0	6	57	20	3	0	0	1	38	109	11	0	0	0	11	52	14	0	0	0	1	40	4	0	489	1,801
4:15 PM	5	7	88	9	0	0	0	11	35	17	5	0	0	2	31	111	8	0	0	0	15	66	11	0	0	0	0	31	1	0	453	1,806
4:30 PM	1	2	81	5	0	0	0	0	36	14	8	0	0	2	28	93	24	0	0	0	15	69	10	0	0	0	0	38	0	0	426	1,872
4:45 PM	1	8	87	4	0	0	0	14	31	13	4	0	0	1	37	94	10	0	0	0	25	60	11	0	0	0	0	29	4	0	433	1,874
5:00 PM	2	14	91	4	0	0	0	17	32	12	9	0	0	1	46	105	13	0	0	0	18	59	21	0	0	0	0	47	3	0	494	1,900
5:15 PM	1	12	81	7	0	0	0	11	40	17	8	0	0	1	36	133	17	0	0	0	28	79	19	0	0	0	0	28	1	0	519	1,794
5:30 PM	1	9	87	5	1	0	0	12	32	13	8	0	0	1	26	108	7	0	0	0	16	43	15	0	0	0	0	35	9	0	428	1,620
5:45 PM	1	8	98	6	0	0	0	14	42	11	6	0	0	1	39	94	18	0	0	1	18	55	15	0	0	0	3	25	4	0	459	0
6:00 PM	2	9	79	8	0	0	0	9	24	6	4	0	0	5	33	105	16	0	0	0	10	39	12	0	0	0	0	25	2	0	388	0
6:15 PM	1	5	75	3	0	0	0	7	27	13	5	0	0	2	24	79	11	0	0	0	17	38	12	0	0	0	0	22	4	0	345	0

Peak Rolling Hour Flow Rates

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Vehicle Type	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	5	41	349	22	1	0	0	54	145	53	29	0	0	4	146	431	55	0	0	1	80	235	69	0	0	0	3	134	17	0	1,874
Mediums	0	2	8	0	0	0	0	0	1	0	2	0	0	0	1	9	0	0	0	0	0	1	1	0	0	0	0	1	0	0	26
Total	5	43	357	22	1	0	0	54	146	53	31	0	0	4	147	440	55	0	0	1	80	236	70	0	0	0	3	135	17	0	1,900
Bicycles on Road	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0						4						3						1						0				8
Heavy Vehicle Percentage			0.0%						0.0%						0.0%						0.0%						0.0%				0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.91						0.88						0.86						0.82						0.88				0.92
Peak Hour Factor (PHF)	0.55	0.77	0.90	0.77	0.25	0.00	0.00	0.79	0.74	0.86	0.86	0.00	0.00	0.45	0.80	0.83	0.67	0.00	0.00	0.25	0.78	0.84	0.83	0.00	0.50	0.00	0.33	0.77	0.53	0.00	0.92

Traffic Counts by Vehicle Type

	Westbound						Northbound						Eastbound						Southbound						Southwestbound						
Time	U-Turn	Left	Thru	Right	Hard Right	RTOR	U-Turn	Left	Thru	Bear Right	Right	RTOR	U-Turn	Left	Bear Left	Thru	Right	RTOR	U-Turn	Hard Left	Left	Thru	Right	RTOR	U-Turn	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	Total
Articulated Trucks																															
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																															
3:30 PM	0	7	105	11	0	0	0	11	30	16	6	0	0	3	38	85	14	0	0	0	8	49	17	0	1	0	3	37	4	0	445
3:45 PM	4	5	84	7	0	0	0	10	40	22	8	0	0	1	30	88	10	0	0	0	18	50	9	0	1	0	0	31	4	0	422
4:00 PM	1	6	105	7	0	0	0	6	56	19	3	0	0	1	38	107	9	0	0	0	11	49	13	0	0	0	1	40	4	0	476
4:15 PM	5	6	85	9	0	0	0	11	33	17	4	0	0	2	31	109	8	0	0	0	14	66	11	0	0	0	0	29	1	0	441
4:30 PM	1	2	79	5	0	0	0	0	35	14	8	0	0	2	27	90	24	0	0	0	15	69	10	0	0	0	0	37	0	0	418
4:45 PM	1	8	82	4	0	0	0	14	31	13	4	0	0	1	37	92	10	0	0	0	25	60	10	0	0	0	0	29	4	0	425
5:00 PM	2	13	88	4	0	0	0	17	31	12	8	0	0	1	45	102	13	0	0	0	18	59	21	0	0	0	0	46	3	0	483
5:15 PM	1	12	79	7	0	0	0	11	40	17	8	0	0	1	36	131	17	0	0	0	28	79	19	0	0	0	0	28	1	0	515
5:30 PM	1	9	86	5	1	0	0	12	32	13	8	0	0	1	26	105	7	0	0	0	16	42	14	0	0	0	0	35	9	0	422
5:45 PM	1	7	96	6	0	0	0	14	42	11	5	0	0	1	39	93	18	0	0	1	18	55	15	0	0	0	3	25	4	0	454
6:00 PM	2	9	77	8	0	0	0	9	24	6	4	0	0	5	33	101	15	0	0	0	10	37	12	0	0	0	0	25	2	0	379
6:15 PM	1	5	75	3	0	0	0	7	26	13	5	0	0	2	24	77	11	0	0	0	17	38	12	0	0	0	0	22	4	0	342
Mediums																															
3:30 PM	0	0	4	0	0	0	0	1	1	1	1	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12
3:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
4:00 PM	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	0	3	1	0	0	0	0	0	0	0	12
4:15 PM	0	1	3	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	10
4:30 PM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7
4:45 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	1	3	0	0	0	0	0	1	0	1	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	11
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	6
5:45 PM	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	2	0	0	0	0	0	0	0	0	9
6:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																															
3:30 PM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	1	1	0	1	2	0	2	1	0	1
4:00 PM	0	0	0	0	2	2	3	1	4	3	0	3	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	1	0	1
4:30 PM	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	2	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	2	2	1	0	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0
5:30 PM	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	1	0	1	1	1	2	0	0	0
6:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0

Pedestrians

	Westbound			Northbound			Eastbound			Southbound			Southwestbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	3	1	4	0	0	0	1	0	1	2	0	2
3:45 PM	1	0	1	1	2	3	3	0	3	2	0	2	5	0	5
4:00 PM	0	0	0	2	0	2	0	1	1	1	4	5	3	2	5
4:15 PM	0	0	0	4	3	7	3	2	5	1	1	2	0	5	5
4:30 PM	0	0	0	2	0	2	1	1	2	4	0	4	2	0	2
4:45 PM	0	2	2	3	1	4	5	0	5	2	1	3	2	2	4
5:00 PM	0	0	0	3	3	6	1	2	3	2	2	4	2	1	3
5:15 PM	0	0	0	2	0	2	3	0	3	4	0	4	4	0	4
5:30 PM	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1
5:45 PM	0	0	0	0	1	1	1	1	2	3	1	4	1	1	2
6:00 PM	0	0	0	1	0	1	2	0	2	5	1	6	0	1	1
6:15 PM	0	0	0	2	0	2	4	0	4	3	0	3	2	0	2

All Traffic Data Services

17 PRINCETON DR & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					PRINCETON DR					PRINCETON DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	2	0	21	2	0	0	1	23	1	0	0	0	1	0	0	0	0	0	1	0	52	352
6:15 AM	1	3	29	0	0	0	2	39	1	0	0	0	1	0	0	0	0	1	2	0	79	418
6:30 AM	2	0	35	4	0	0	1	53	1	0	0	0	2	0	0	0	3	0	2	0	103	474
6:45 AM	3	7	43	0	0	1	1	50	0	0	0	1	1	2	0	0	2	4	3	0	118	549
7:00 AM	0	5	43	2	0	0	1	51	1	0	0	0	4	4	0	1	3	0	3	0	118	620
7:15 AM	1	0	54	3	0	1	2	58	2	0	0	2	4	2	0	0	0	5	1	0	135	690
7:30 AM	0	5	60	4	0	0	4	87	4	0	0	0	1	3	0	0	5	1	4	0	178	748
7:45 AM	3	7	71	2	0	1	2	80	6	0	0	2	5	1	0	0	2	1	6	0	189	777
8:00 AM	2	6	80	6	0	1	3	66	16	0	0	0	0	3	0	0	1	1	3	0	188	801
8:15 AM	1	8	97	2	0	1	3	67	2	0	0	1	3	2	0	0	4	0	2	0	193	0
8:30 AM	3	5	91	2	0	0	3	80	4	0	0	3	4	2	0	0	4	3	3	0	207	0
8:45 AM	1	3	92	0	0	0	1	98	10	0	0	1	4	0	0	0	2	0	1	0	213	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	7	21	342	10	0	2	10	296	30	0	0	5	11	7	0	0	11	4	9	0	765
Mediums	0	0	18	0	0	0	0	14	2	0	0	0	0	0	0	0	0	0	0	0	34
Total	7	22	360	10	0	2	10	311	32	0	0	5	11	7	0	0	11	4	9	0	801
Bicycles on Road	0	0	0	0	0	0	0	1	3	0	0	0	5	0	0	0	0	0	0	0	9
Bicycles on Crosswalk			1					1					1					1			4
Heavy Vehicle Percentage			0.3%					0.3%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.92					0.81					0.88					0.80			0.94
Peak Hour Factor (PHF)	0.75	0.81	0.93	0.63	0.00	0.75	0.75	0.79	0.50	0.00	0.00	0.50	0.70	0.69	0.00	0.25	0.60	0.50	0.63	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	2	0	20	2	0	0	1	22	1	0	0	0	1	0	0	0	0	0	1	0	50
6:15 AM	1	3	25	0	0	0	2	35	1	0	0	0	1	0	0	0	0	1	2	0	71
6:30 AM	2	0	33	4	0	0	1	49	1	0	0	0	2	0	0	0	3	0	2	0	97
6:45 AM	3	7	39	0	0	1	1	47	0	0	0	1	1	2	0	0	2	4	3	0	111
7:00 AM	0	5	40	2	0	0	1	48	1	0	0	0	4	3	0	1	3	0	3	0	111
7:15 AM	0	0	50	3	0	1	2	54	2	0	0	2	4	2	0	0	0	5	1	0	126
7:30 AM	0	5	57	4	0	0	4	82	4	0	0	0	1	3	0	0	5	1	4	0	170
7:45 AM	3	7	67	2	0	1	2	75	6	0	0	2	5	1	0	0	2	1	6	0	180
8:00 AM	2	6	77	6	0	1	3	62	15	0	0	0	0	3	0	0	1	1	3	0	180
8:15 AM	1	7	92	2	0	1	3	64	2	0	0	1	3	2	0	0	4	0	2	0	184
8:30 AM	3	5	87	2	0	0	3	76	4	0	0	3	4	2	0	0	4	3	3	0	199
8:45 AM	1	3	86	0	0	0	1	94	9	0	0	1	4	0	0	0	2	0	1	0	202
Mediums																					
6:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
6:30 AM	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
6:45 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
7:00 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	7
7:15 AM	1	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
7:45 AM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
8:00 AM	0	0	3	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	8
8:15 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
8:45 AM	0	0	6	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	4

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
7:15 AM	0	0	0	1	0	1	0	1	1	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	1	1	0	1
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	2	2	0	0	0
6:15 AM	0	0	0	0	0	0	1	2	3	1	0	1
6:30 AM	1	2	3	0	0	0	1	3	4	0	0	0
6:45 AM	1	0	1	0	0	0	2	1	3	1	1	2
7:00 AM	0	2	2	0	0	0	1	3	4	2	1	3
7:15 AM	0	1	1	1	0	1	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
7:45 AM	0	3	3	2	0	2	3	3	6	1	0	1
8:00 AM	0	3	3	1	1	2	0	4	4	1	1	2
8:15 AM	2	4	6	0	0	0	1	1	2	1	0	1
8:30 AM	0	1	1	0	0	0	0	4	4	2	0	2
8:45 AM	0	0	0	1	0	1	2	0	2	0	0	0

All Traffic Data Services

17 PRINCETON DR & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
11:30 AM - 11:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					PRINCETON DR					PRINCETON DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	3	2	119	11	0	0	3	113	2	0	0	3	1	3	0	0	4	3	3	0	270	1,295
11:15 AM	3	8	121	5	0	1	11	147	2	0	0	1	0	5	0	0	1	1	3	0	309	1,391
11:30 AM	5	6	139	10	0	7	7	166	3	0	0	2	1	7	0	0	4	5	7	0	369	1,417
11:45 AM	2	9	141	4	0	4	11	150	4	0	0	1	3	4	0	0	4	1	9	0	347	1,402
12:00 PM	7	7	152	6	0	3	13	147	3	0	0	3	5	6	0	0	7	4	3	0	366	1,408
12:15 PM	4	4	134	8	0	3	8	147	3	0	0	2	3	3	0	0	4	5	7	0	335	1,378
12:30 PM	5	14	139	4	0	5	8	150	6	0	0	2	2	5	0	0	6	3	5	0	354	1,376
12:45 PM	3	12	149	14	0	3	7	129	8	0	0	2	4	9	0	0	7	2	4	0	353	1,332
1:00 PM	1	1	131	13	0	5	7	147	5	0	0	2	4	3	0	0	6	3	8	0	336	1,286
1:15 PM	4	2	137	9	0	2	8	139	8	0	0	4	2	3	0	0	3	2	10	0	333	0
1:30 PM	4	3	129	6	0	4	5	139	5	0	0	3	1	4	0	0	4	3	0	0	310	0
1:45 PM	4	9	130	7	0	3	7	126	2	0	0	1	4	3	0	0	3	2	6	0	307	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	18	26	547	27	0	17	37	582	12	0	0	8	12	19	0	0	19	15	26	0	1,365
Mediums	0	0	18	1	0	0	2	27	1	0	0	0	0	1	0	0	0	0	0	0	50
Total	18	26	566	28	0	17	39	610	13	0	0	8	12	20	0	0	19	15	26	0	1,417
Bicycles on Road	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	5
Bicycles on Crosswalk			2					6					2					1			11
Heavy Vehicle Percentage			0.2%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.93					0.93					0.77					0.88			0.96
Peak Hour Factor (PHF)	0.68	0.66	0.94	0.75	0.00	0.61	0.81	0.92	0.84	0.00	0.00	0.69	0.70	0.64	0.00	0.00	0.86	0.75	0.68	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	3	2	115	11	0	0	3	109	2	0	0	3	1	3	0	0	4	3	3	0	262
11:15 AM	3	8	116	5	0	1	11	141	2	0	0	1	0	5	0	0	1	1	3	0	298
11:30 AM	5	6	135	10	0	7	6	157	3	0	0	2	1	7	0	0	4	5	7	0	355
11:45 AM	2	9	137	4	0	4	11	144	3	0	0	1	3	3	0	0	4	1	9	0	335
12:00 PM	7	7	144	6	0	3	12	142	3	0	0	3	5	6	0	0	7	4	3	0	352
12:15 PM	4	4	131	7	0	3	8	139	3	0	0	2	3	3	0	0	4	5	7	0	323
12:30 PM	5	14	136	4	0	5	8	144	6	0	0	2	2	5	0	0	6	3	5	0	345
12:45 PM	3	11	144	14	0	3	7	117	7	0	0	2	4	9	0	0	7	2	4	0	334
1:00 PM	1	1	128	13	0	5	7	144	5	0	0	2	4	3	0	0	6	3	8	0	330
1:15 PM	4	2	133	9	0	2	7	131	8	0	0	4	2	3	0	0	3	2	10	0	320
1:30 PM	4	3	124	6	0	4	5	133	5	0	0	3	1	4	0	0	4	3	0	0	299
1:45 PM	4	8	125	7	0	3	6	120	2	0	0	1	4	3	0	0	3	2	6	0	294
Mediums																					
11:00 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
11:15 AM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
11:30 AM	0	0	4	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	14
11:45 AM	0	0	4	0	0	0	0	5	1	0	0	0	0	1	0	0	0	0	0	0	11
12:00 PM	0	0	8	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	14
12:15 PM	0	0	2	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	11
12:30 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
12:45 PM	0	1	4	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	15
1:00 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
1:15 PM	0	0	4	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	13
1:30 PM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
1:45 PM	0	1	5	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	13
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
11:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	4
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
1:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	1	0	1	1	0	1	0	0	0	0	0	0
11:45 AM	0	0	0	1	0	1	0	0	0	1	0	1
12:00 PM	0	0	0	2	1	3	0	0	0	0	0	0
12:15 PM	1	0	1	0	1	1	1	1	2	0	0	0
12:30 PM	0	2	2	1	0	1	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	2	3	2	0	2
1:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	2	2	0	0	0	5	5	10	1	0	1
11:15 AM	0	0	0	0	0	0	3	2	5	0	0	0
11:30 AM	2	2	4	0	0	0	0	1	1	2	0	2
11:45 AM	1	2	3	2	1	3	2	1	3	0	1	1
12:00 PM	4	2	6	0	0	0	1	2	3	2	1	3
12:15 PM	0	0	0	1	0	1	5	8	13	2	1	3
12:30 PM	3	4	7	0	2	2	4	3	7	0	3	3
12:45 PM	1	2	3	4	0	4	4	0	4	3	0	3
1:00 PM	4	2	6	1	1	2	3	2	5	2	1	3
1:15 PM	3	2	5	1	0	1	2	4	6	1	0	1
1:30 PM	0	0	0	1	0	1	4	0	4	2	1	3
1:45 PM	1	1	2	0	1	1	2	3	5	0	1	1

All Traffic Data Services

17 PRINCETON DR & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					PRINCETON DR					PRINCETON DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	5	8	126	2	0	2	12	142	17	0	0	4	2	10	0	0	6	4	6	0	346	1,343
3:45 PM	1	12	117	6	0	2	7	118	10	0	0	2	2	5	0	0	6	3	9	0	300	1,295
4:00 PM	3	10	153	2	0	1	6	151	9	0	0	4	6	3	0	0	4	6	2	0	360	1,326
4:15 PM	4	8	140	7	0	3	10	125	9	0	0	0	3	3	0	0	10	6	9	0	337	1,334
4:30 PM	3	6	108	5	0	5	5	108	12	0	0	5	9	9	0	0	9	8	6	0	298	1,373
4:45 PM	2	7	137	4	0	1	9	134	5	0	0	2	2	6	0	0	5	6	11	0	331	1,382
5:00 PM	2	5	135	6	0	5	9	141	14	0	0	3	0	8	0	0	10	16	14	0	368	1,401
5:15 PM	4	8	173	11	0	2	9	122	13	0	0	4	3	2	0	0	9	4	12	0	376	1,339
5:30 PM	4	4	120	3	0	1	14	131	6	0	0	0	4	5	0	0	7	2	6	0	307	1,248
5:45 PM	1	6	151	10	0	4	9	125	15	0	0	3	3	4	0	0	4	6	9	0	350	0
6:00 PM	0	10	115	4	0	0	5	108	13	0	0	2	7	7	0	0	14	7	14	0	306	0
6:15 PM	3	7	128	6	0	1	4	96	13	0	0	0	6	2	0	0	5	7	7	0	285	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	11	23	569	30	0	12	41	509	48	0	0	10	10	18	0	0	30	28	41	0	1,380
Mediums	0	0	10	0	0	0	0	10	0	0	0	0	0	1	0	0	0	0	0	0	21
Total	11	23	579	30	0	12	41	519	48	0	0	10	10	19	0	0	30	28	41	0	1,401
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	0	0	7
Bicycles on Crosswalk			3					1					7					0			11
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.82					0.90					0.58					0.69			0.93
Peak Hour Factor (PHF)	0.65	0.79	0.84	0.68	0.00	0.70	0.73	0.89	0.80	0.00	0.00	0.70	0.56	0.72	0.00	0.00	0.61	0.56	0.77	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	5	8	123	2	0	2	12	138	16	0	0	4	2	10	0	0	6	4	6	0	338
3:45 PM	1	12	113	6	0	2	7	115	10	0	0	2	2	5	0	0	6	3	9	0	293
4:00 PM	3	9	148	2	0	1	6	148	9	0	0	4	6	3	0	0	4	6	2	0	351
4:15 PM	4	8	139	7	0	3	9	121	9	0	0	0	3	3	0	0	10	6	8	0	330
4:30 PM	3	6	105	5	0	5	5	106	12	0	0	5	9	9	0	0	9	8	6	0	293
4:45 PM	2	7	135	4	0	1	9	126	5	0	0	2	2	6	0	0	5	6	11	0	321
5:00 PM	2	5	131	6	0	5	9	137	14	0	0	3	0	7	0	0	10	16	14	0	359
5:15 PM	4	8	171	11	0	2	9	120	13	0	0	4	3	2	0	0	9	4	12	0	372
5:30 PM	4	4	117	3	0	1	14	129	6	0	0	0	4	5	0	0	7	2	6	0	302
5:45 PM	1	6	150	10	0	4	9	123	15	0	0	3	3	4	0	0	4	6	9	0	347
6:00 PM	0	10	110	4	0	0	5	106	13	0	0	1	7	7	0	0	14	7	14	0	298
6:15 PM	3	7	125	6	0	1	4	96	13	0	0	0	6	2	0	0	5	7	7	0	282
Mediums																					
3:30 PM	0	0	3	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	8
3:45 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
4:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
4:15 PM	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
5:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	9
5:15 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	5	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	8
6:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	1	1	2	0	0	0
3:45 PM	2	0	2	0	0	0	0	1	1	1	0	1
4:00 PM	0	0	0	0	1	1	0	2	2	0	1	1
4:15 PM	0	0	0	0	0	0	1	0	1	1	0	1
4:30 PM	0	0	0	1	0	1	1	2	3	1	0	1
4:45 PM	0	0	0	0	0	0	3	5	8	0	0	0
5:00 PM	1	0	1	0	1	1	0	3	3	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:30 PM	1	0	1	0	0	0	0	1	1	0	0	0
5:45 PM	1	0	1	0	0	0	1	1	2	0	0	0
6:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	2	0	2	0	1	1	3	4	7	0	0	0
3:45 PM	3	1	4	0	1	1	3	2	5	1	0	1
4:00 PM	3	1	4	1	1	2	3	0	3	0	1	1
4:15 PM	1	1	2	1	0	1	6	2	8	0	0	0
4:30 PM	3	1	4	4	4	8	1	2	3	0	0	0
4:45 PM	1	0	1	1	3	4	3	2	5	2	3	5
5:00 PM	7	1	8	0	2	2	3	2	5	2	1	3
5:15 PM	6	0	6	2	2	4	0	0	0	2	1	3
5:30 PM	1	1	2	1	2	3	1	1	2	0	1	1
5:45 PM	0	2	2	1	4	5	0	1	1	0	0	0
6:00 PM	0	0	0	0	1	1	2	1	3	1	0	1
6:15 PM	3	2	5	1	0	1	4	3	7	6	1	7

All Traffic Data Services

18 STANFORD DR & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	24	1	0	2	0	24	0	0	0	1	0	0	0	0	0	0	0	0	52	349
6:15 AM	0	2	34	1	0	0	0	39	0	0	0	0	0	1	0	0	0	0	0	0	77	409
6:30 AM	1	3	37	2	0	2	1	50	0	0	0	2	0	2	0	0	0	2	1	0	103	461
6:45 AM	0	1	46	0	0	1	1	57	1	0	0	1	0	3	0	0	2	1	3	0	117	526
7:00 AM	0	3	47	0	0	2	2	48	0	0	0	1	3	1	0	0	2	2	1	0	112	595
7:15 AM	0	3	58	2	0	0	0	61	1	0	0	0	0	3	0	0	1	0	0	0	129	678
7:30 AM	0	3	64	1	0	3	0	84	1	0	0	0	1	6	0	0	1	1	3	0	168	730
7:45 AM	0	9	76	1	0	0	4	88	2	0	0	0	3	1	0	0	1	0	1	0	186	759
8:00 AM	1	3	92	2	0	5	1	81	1	0	0	2	1	4	0	0	2	0	0	0	195	767
8:15 AM	0	2	100	1	0	3	0	65	1	0	0	0	2	4	0	0	2	0	1	0	181	0
8:30 AM	0	9	95	1	0	2	1	82	0	0	0	2	2	3	0	0	0	0	0	0	197	0
8:45 AM	0	2	89	2	0	1	2	90	0	0	0	0	2	3	0	0	0	2	1	0	194	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	1	13	360	6	0	11	4	301	2	0	0	4	6	12	0	0	4	2	2	0	728
Mediums	0	3	15	0	0	0	0	16	0	0	0	0	1	2	0	0	0	0	0	0	37
Total	1	16	376	6	0	11	4	318	2	0	0	4	7	14	0	0	4	2	2	0	767
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			0					1					1					0			2
Heavy Vehicle Percentage			0.3%					0.3%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.95					0.90					0.89					0.71			0.97
Peak Hour Factor (PHF)	0.25	0.64	0.94	0.75	0.00	0.55	0.38	0.88	0.63	0.00	0.00	0.50	0.67	0.63	0.00	0.00	0.75	0.63	0.58	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	21	1	0	2	0	23	0	0	0	1	0	0	0	0	0	0	0	0	48
6:15 AM	0	2	29	1	0	0	0	35	0	0	0	0	0	1	0	0	0	0	0	0	68
6:30 AM	1	2	35	2	0	2	1	46	0	0	0	2	0	2	0	0	0	2	1	0	96
6:45 AM	0	1	43	0	0	1	1	54	1	0	0	1	0	3	0	0	2	1	3	0	111
7:00 AM	0	3	44	0	0	2	2	45	0	0	0	1	2	1	0	0	2	1	1	0	104
7:15 AM	0	3	54	2	0	0	0	56	1	0	0	0	0	3	0	0	1	0	0	0	120
7:30 AM	0	3	61	1	0	3	0	79	1	0	0	0	1	6	0	0	1	1	3	0	160
7:45 AM	0	8	72	1	0	0	4	82	2	0	0	0	3	1	0	0	1	0	1	0	175
8:00 AM	1	1	88	2	0	5	1	77	1	0	0	2	1	4	0	0	2	0	0	0	185
8:15 AM	0	1	96	1	0	3	0	62	1	0	0	0	2	4	0	0	2	0	1	0	173
8:30 AM	0	9	92	1	0	2	1	77	0	0	0	2	1	2	0	0	0	0	0	0	187
8:45 AM	0	2	84	2	0	1	2	85	0	0	0	0	2	2	0	0	0	2	1	0	183
Mediums																					
6:00 AM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
6:30 AM	0	1	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
6:45 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:00 AM	0	0	3	0	0	0	0	3	0	0	0	0	1	0	0	0	0	1	0	0	8
7:15 AM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
7:45 AM	0	1	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
8:00 AM	0	2	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
8:15 AM	0	1	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	3	0	0	0	0	4	0	0	0	0	1	1	0	0	0	0	0	0	9
8:45 AM	0	0	5	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	11
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	1	0	1	0	1	1	0	0	0
7:30 AM	0	0	0	2	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	2	0	2	0	1	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	1	2	3	0	0	0
6:15 AM	0	0	0	1	0	1	3	2	5	1	0	1
6:30 AM	0	0	0	1	0	1	2	3	5	0	0	0
6:45 AM	0	0	0	2	0	2	4	2	6	0	1	1
7:00 AM	0	0	0	2	0	2	5	4	9	0	0	0
7:15 AM	0	0	0	1	0	1	0	0	0	1	0	1
7:30 AM	0	0	0	3	0	3	2	0	2	0	0	0
7:45 AM	0	0	0	1	1	2	3	6	9	1	0	1
8:00 AM	0	0	0	0	0	0	0	3	3	0	0	0
8:15 AM	0	0	0	2	0	2	4	6	10	0	0	0
8:30 AM	0	0	0	3	1	4	0	1	1	2	0	2
8:45 AM	0	0	0	1	1	2	2	2	4	0	1	1

All Traffic Data Services

18 STANFORD DR & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
11:30 AM - 11:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	6	123	2	0	2	2	111	1	0	0	2	0	3	0	0	3	1	7	0	263	1,244
11:15 AM	1	5	127	6	0	5	0	137	1	0	0	1	1	2	0	0	0	1	4	0	291	1,309
11:30 AM	0	2	145	6	0	6	4	182	1	0	0	0	1	4	0	0	1	2	5	0	359	1,353
11:45 AM	0	6	151	2	0	9	6	148	1	0	0	1	0	3	0	0	3	0	1	0	331	1,335
12:00 PM	0	3	152	5	0	6	4	145	1	0	0	1	1	6	0	0	1	2	1	0	328	1,322
12:15 PM	0	6	147	5	0	6	7	146	2	0	0	1	6	4	0	0	1	2	2	0	335	1,307
12:30 PM	2	8	145	3	0	5	6	152	1	0	0	0	2	5	0	0	5	1	6	0	341	1,278
12:45 PM	1	6	154	5	0	5	2	128	1	0	0	0	4	5	0	0	1	1	5	0	318	1,233
1:00 PM	0	1	128	9	0	2	2	155	1	0	0	1	1	5	0	0	2	3	3	0	313	1,201
1:15 PM	0	5	137	3	0	6	5	135	2	0	0	3	1	6	0	0	1	1	1	0	306	0
1:30 PM	0	8	125	5	0	3	3	134	0	0	0	1	2	3	0	0	5	3	4	0	296	0
1:45 PM	0	2	137	6	0	6	0	123	1	0	0	0	2	3	0	0	4	0	2	0	286	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	17	574	18	0	27	21	596	5	0	0	3	8	17	0	0	6	6	9	0	1,307
Mediums	0	0	20	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	44
Total	0	17	595	18	0	27	21	621	5	0	0	3	8	17	0	0	6	6	9	0	1,353
Bicycles on Road	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4
Bicycles on Crosswalk			0					1					2					1			4
Heavy Vehicle Percentage			0.2%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.97					0.87					0.80					0.67			0.94
Peak Hour Factor (PHF)	0.38	0.72	0.97	0.64	0.00	0.75	0.82	0.85	0.63	0.00	0.00	0.42	0.54	0.88	0.00	0.00	0.60	0.67	0.61	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	6	119	2	0	2	2	108	1	0	0	2	0	3	0	0	3	1	7	0	256
11:15 AM	1	5	121	6	0	5	0	132	1	0	0	1	1	2	0	0	0	0	4	0	279
11:30 AM	0	2	140	6	0	6	4	173	1	0	0	0	1	4	0	0	1	2	5	0	345
11:45 AM	0	6	146	2	0	9	6	142	1	0	0	1	0	3	0	0	3	0	1	0	320
12:00 PM	0	3	146	5	0	6	4	142	1	0	0	1	1	6	0	0	1	2	1	0	319
12:15 PM	0	6	142	5	0	6	7	139	2	0	0	1	6	4	0	0	1	2	2	0	323
12:30 PM	2	8	142	3	0	5	5	146	1	0	0	0	2	5	0	0	5	1	6	0	331
12:45 PM	1	5	149	4	0	5	2	119	1	0	0	0	4	5	0	0	1	1	5	0	302
1:00 PM	0	1	125	9	0	2	2	149	1	0	0	1	1	5	0	0	2	2	3	0	303
1:15 PM	0	5	135	3	0	6	5	126	2	0	0	3	1	6	0	0	1	1	1	0	295
1:30 PM	0	8	118	5	0	3	3	130	0	0	0	1	2	3	0	0	5	3	4	0	285
1:45 PM	0	2	131	5	0	6	0	118	1	0	0	0	2	3	0	0	4	0	2	0	274
Mediums																					
11:00 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
11:15 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	10
11:30 AM	0	0	5	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	14
11:45 AM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	9
12:15 PM	0	0	4	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11
12:30 PM	0	0	2	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	9
12:45 PM	0	1	4	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	13
1:00 PM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	9
1:15 PM	0	0	2	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	11
1:30 PM	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
1:45 PM	0	0	6	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	12
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	1	2	0	1	1	0	0	0
11:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	1	0	1	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	1	0	1	0	1	1	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:45 PM	0	0	0	0	0	0	1	1	2	0	0	0
1:00 PM	0	0	0	1	0	1	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
1:45 PM	0	0	0	0	1	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	2	4	6	6	3	9	0	0	0
11:15 AM	0	0	0	0	1	1	3	4	7	0	0	0
11:30 AM	0	0	0	1	0	1	3	2	5	1	0	1
11:45 AM	0	0	0	1	1	2	2	1	3	0	1	1
12:00 PM	0	0	0	1	2	3	3	4	7	2	2	4
12:15 PM	0	0	0	2	0	2	4	6	10	2	2	4
12:30 PM	0	0	0	1	3	4	6	0	6	1	1	2
12:45 PM	0	0	0	0	4	4	3	0	3	3	1	4
1:00 PM	0	0	0	4	11	15	0	1	1	2	5	7
1:15 PM	0	0	0	2	4	6	8	10	18	1	0	1
1:30 PM	0	0	0	1	0	1	8	3	11	1	0	1
1:45 PM	0	0	0	7	1	8	3	5	8	1	1	2

All Traffic Data Services

18 STANFORD DR & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	7	127	6	0	5	0	147	6	0	0	1	1	7	0	0	1	2	5	0	315	1,252
3:45 PM	0	7	128	8	0	5	1	124	5	0	0	0	0	4	0	0	2	0	5	0	289	1,209
4:00 PM	1	7	160	2	0	6	2	137	5	0	0	0	2	7	0	0	1	1	3	0	334	1,220
4:15 PM	1	10	144	0	0	0	3	137	4	0	0	1	4	5	0	0	1	2	2	0	314	1,198
4:30 PM	0	5	122	2	0	7	2	115	2	0	0	0	2	3	0	0	1	2	9	0	272	1,236
4:45 PM	0	4	135	6	0	0	1	139	5	0	0	0	0	3	0	0	6	0	1	0	300	1,275
5:00 PM	0	7	139	4	0	2	0	138	2	0	0	1	0	6	0	0	4	1	8	0	312	1,299
5:15 PM	0	10	166	2	0	5	4	133	3	0	0	1	1	5	0	0	6	0	16	0	352	1,294
5:30 PM	0	19	124	1	0	4	3	131	2	0	0	0	2	6	0	0	3	4	12	0	311	1,217
5:45 PM	0	26	134	4	0	3	3	125	5	0	0	3	2	4	0	0	4	1	10	0	324	0
6:00 PM	0	24	132	5	0	3	2	113	1	0	0	3	3	4	0	1	2	2	12	0	307	0
6:15 PM	0	13	116	3	0	6	0	117	3	0	0	2	2	1	0	0	2	2	8	0	275	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	61	554	11	0	14	10	517	12	0	0	5	5	21	0	0	17	6	46	0	1,279
Mediums	0	1	9	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	20
Total	0	62	563	11	0	14	10	527	12	0	0	5	5	21	0	0	17	6	46	0	1,299
Bicycles on Road	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	6
Bicycles on Crosswalk			0					5					8					2			15
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.91					0.93					0.85					0.83			0.92
Peak Hour Factor (PHF)	0.50	0.79	0.85	0.50	0.00	0.64	0.75	0.93	0.83	0.00	0.00	0.67	0.75	0.82	0.00	0.25	0.79	0.56	0.78	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	7	124	6	0	5	0	144	6	0	0	1	1	7	0	0	1	2	5	0	309
3:45 PM	0	7	125	8	0	5	1	120	5	0	0	0	0	3	0	0	2	0	5	0	281
4:00 PM	1	7	154	2	0	6	2	134	5	0	0	0	2	7	0	0	1	1	3	0	325
4:15 PM	1	10	143	0	0	0	3	132	4	0	0	1	4	5	0	0	1	2	2	0	308
4:30 PM	0	5	119	2	0	7	2	113	2	0	0	0	2	3	0	0	1	2	9	0	267
4:45 PM	0	4	133	6	0	0	1	132	5	0	0	0	0	2	0	0	6	0	1	0	290
5:00 PM	0	7	135	4	0	2	0	134	2	0	0	1	0	6	0	0	4	1	8	0	304
5:15 PM	0	9	165	2	0	5	4	131	3	0	0	1	1	5	0	0	6	0	16	0	348
5:30 PM	0	19	121	1	0	4	3	129	2	0	0	0	2	6	0	0	3	4	12	0	306
5:45 PM	0	26	133	4	0	3	3	123	5	0	0	3	2	4	0	0	4	1	10	0	321
6:00 PM	0	24	127	5	0	3	2	110	1	0	0	3	3	4	0	1	2	2	12	0	299
6:15 PM	0	13	113	3	0	6	0	115	3	0	0	2	2	1	0	0	2	2	8	0	270
Mediums																					
3:30 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	0	3	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	8
4:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	2	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	8
5:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
5:15 PM	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
6:15 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	1	2	2	0	2	0	0	0
3:45 PM	0	0	0	1	0	1	1	0	1	0	0	0
4:00 PM	0	0	0	2	0	2	0	1	1	0	1	1
4:15 PM	0	0	0	1	1	2	0	0	0	1	0	1
4:30 PM	0	0	0	1	0	1	2	2	4	1	0	1
4:45 PM	0	0	0	1	0	1	3	3	6	0	0	0
5:00 PM	0	0	0	1	0	1	2	3	5	0	0	0
5:15 PM	0	0	0	1	2	3	1	0	1	0	2	2
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	0	0	0	1	0	1	0	1	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	3	3	5	6	11	0	1	1
3:45 PM	0	0	0	1	0	1	6	2	8	2	0	2
4:00 PM	0	0	0	2	0	2	1	3	4	1	1	2
4:15 PM	0	0	0	1	4	5	2	2	4	1	4	5
4:30 PM	0	0	0	1	0	1	1	2	3	1	2	3
4:45 PM	0	0	0	2	1	3	5	0	5	5	2	7
5:00 PM	0	0	0	4	2	6	2	3	5	2	3	5
5:15 PM	0	0	0	3	1	4	4	2	6	1	0	1
5:30 PM	0	0	0	0	1	1	4	3	7	0	1	1
5:45 PM	0	0	0	2	1	3	2	0	2	0	1	1
6:00 PM	0	0	0	1	5	6	6	5	11	0	0	0
6:15 PM	0	0	0	0	1	1	3	4	7	8	1	9

All Traffic Data Services

19 CORNELL DR & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					CORNELL DR					CORNELL DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	1	0	23	1	0	0	1	24	0	0	0	1	0	0	0	0	0	0	0	0	51	351
6:15 AM	1	0	34	3	0	0	1	38	0	0	0	1	0	2	0	0	0	0	0	0	80	406
6:30 AM	0	0	37	2	0	0	1	53	0	0	0	4	0	7	0	0	0	0	0	0	104	455
6:45 AM	1	0	46	5	0	0	4	59	0	0	0	1	0	0	0	0	0	0	0	0	116	522
7:00 AM	0	0	48	5	0	0	2	49	0	0	0	0	0	2	0	0	0	0	0	0	106	596
7:15 AM	0	0	59	4	0	0	3	56	0	0	0	3	0	4	0	0	0	0	0	0	129	680
7:30 AM	0	0	71	5	0	0	5	86	0	0	0	4	0	0	0	0	0	0	0	0	171	734
7:45 AM	0	0	80	10	0	0	9	83	0	0	0	5	0	3	0	0	0	0	0	0	190	766
8:00 AM	0	0	95	8	0	0	6	70	0	0	0	8	0	3	0	0	0	0	0	0	190	762
8:15 AM	0	0	100	8	0	2	6	58	0	0	0	3	0	6	0	0	0	0	0	0	183	0
8:30 AM	0	0	94	11	0	0	6	84	0	0	0	5	0	3	0	0	0	0	0	0	203	0
8:45 AM	0	0	89	7	0	0	8	75	0	0	0	3	0	4	0	0	0	0	0	0	186	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	0	352	37	0	2	26	278	0	0	0	21	0	13	0	0	0	0	0	0	729
Mediums	0	0	16	0	0	0	1	16	0	0	0	0	0	2	0	0	0	0	0	0	35
Total	0	0	369	37	0	2	27	295	0	0	0	21	0	15	0	0	0	0	0	0	766
Bicycles on Road	0	1	0	1	0	0	0	2	0	0	0	0	5	0	0	0	0	1	0	0	10
Bicycles on Crosswalk			1					5					0					2			8
Heavy Vehicle Percentage			0.2%					0.3%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.95					0.88					0.82					0.00			0.94
Peak Hour Factor (PHF)	0.75	0.00	0.95	0.84	0.00	0.25	0.75	0.86	0.00	0.00	0.00	0.66	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	1	0	20	1	0	0	1	23	0	0	0	1	0	0	0	0	0	0	0	0	47
6:15 AM	1	0	30	3	0	0	1	34	0	0	0	1	0	1	0	0	0	0	0	0	71
6:30 AM	0	0	33	2	0	0	1	49	0	0	0	4	0	7	0	0	0	0	0	0	96
6:45 AM	1	0	44	5	0	0	4	56	0	0	0	1	0	0	0	0	0	0	0	0	111
7:00 AM	0	0	45	5	0	0	2	46	0	0	0	0	0	2	0	0	0	0	0	0	100
7:15 AM	0	0	57	4	0	0	3	52	0	0	0	3	0	2	0	0	0	0	0	0	121
7:30 AM	0	0	68	4	0	0	4	81	0	0	0	4	0	0	0	0	0	0	0	0	161
7:45 AM	0	0	75	10	0	0	8	78	0	0	0	5	0	3	0	0	0	0	0	0	179
8:00 AM	0	0	89	8	0	0	6	66	0	0	0	8	0	3	0	0	0	0	0	0	180
8:15 AM	0	0	96	8	0	2	6	55	0	0	0	3	0	5	0	0	0	0	0	0	175
8:30 AM	0	0	92	11	0	0	6	79	0	0	0	5	0	2	0	0	0	0	0	0	195
8:45 AM	0	0	84	7	0	0	8	70	0	0	0	3	0	4	0	0	0	0	0	0	176
Mediums																					
6:00 AM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	9
6:30 AM	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7
6:45 AM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:15 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	2	0	0	0	0	0	0	8
7:30 AM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
7:45 AM	0	0	5	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	11
8:00 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
8:15 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	8
8:30 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	7
8:45 AM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	1	0	1	1	0	1	0	0	0	0	1	1
6:45 AM	1	0	1	0	0	0	1	1	2	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	2	2	0	1	1	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	0	2	0	2	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	1	3	0	3	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	2	4	6	0	0	0
6:15 AM	7	5	12	7	4	11	8	3	11	1	1	2
6:30 AM	3	5	8	3	6	9	2	7	9	0	1	1
6:45 AM	3	2	5	3	1	4	6	6	12	0	1	1
7:00 AM	3	4	7	2	2	4	9	6	15	0	0	0
7:15 AM	4	5	9	0	1	1	10	5	15	1	1	2
7:30 AM	1	2	3	2	4	6	3	3	6	1	1	2
7:45 AM	2	9	11	1	0	1	5	12	17	1	1	2
8:00 AM	3	5	8	3	1	4	2	5	7	0	1	1
8:15 AM	4	8	12	2	2	4	2	5	7	1	3	4
8:30 AM	3	11	14	3	2	5	2	5	7	4	1	5
8:45 AM	1	4	5	6	2	8	9	6	15	1	1	2

All Traffic Data Services

19 CORNELL DR & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					CORNELL DR					CORNELL DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	126	22	0	0	4	119	0	0	0	6	0	7	0	0	0	0	0	0	284	1,312
11:15 AM	0	0	141	18	0	2	7	133	0	0	0	8	0	2	0	0	0	0	0	0	311	1,379
11:30 AM	0	0	142	22	0	1	18	161	0	0	0	3	0	7	0	0	0	0	0	0	354	1,439
11:45 AM	0	0	153	37	0	1	15	140	0	0	0	9	0	8	0	0	0	0	0	0	363	1,438
12:00 PM	1	0	150	38	0	1	16	129	0	0	0	7	0	9	0	0	0	0	0	0	351	1,430
12:15 PM	0	0	140	37	0	0	10	151	0	0	0	16	0	17	0	0	0	0	0	0	371	1,405
12:30 PM	0	0	147	21	0	3	17	143	0	0	0	12	0	10	0	0	0	0	0	0	353	1,340
12:45 PM	0	0	150	35	0	0	16	121	0	0	0	20	0	13	0	0	0	0	0	0	355	1,312
1:00 PM	0	0	132	22	0	0	13	143	0	0	0	11	0	5	0	0	0	0	0	0	326	1,255
1:15 PM	0	0	126	23	0	0	9	129	0	0	0	11	0	8	0	0	0	0	0	0	306	0
1:30 PM	0	0	138	15	0	1	8	140	0	0	0	14	0	9	0	0	0	0	0	0	325	0
1:45 PM	0	0	140	10	0	0	9	123	0	0	0	8	0	8	0	0	0	0	0	0	298	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Lights	1	0	565	134	0	3	59	556	0	0	0	35	0	40	0	0	0	0	0	0	1,393
Mediums	0	0	20	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	44
Total	1	0	585	134	0	3	59	581	0	0	0	35	0	41	0	0	0	0	0	0	1,439
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	4
Bicycles on Crosswalk			5					0					3					0			8
Heavy Vehicle Percentage			0.0%					0.2%					1.3%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.95					0.89					0.79					0.00			0.97
Peak Hour Factor (PHF)	0.25	0.00	0.96	0.88	0.00	0.42	0.82	0.90	0.00	0.00	0.00	0.74	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	122	21	0	0	4	116	0	0	0	6	0	7	0	0	0	0	0	0	276
11:15 AM	0	0	135	18	0	2	7	128	0	0	0	8	0	2	0	0	0	0	0	0	300
11:30 AM	0	0	137	22	0	1	18	152	0	0	0	3	0	7	0	0	0	0	0	0	340
11:45 AM	0	0	148	37	0	1	15	134	0	0	0	9	0	8	0	0	0	0	0	0	352
12:00 PM	1	0	144	38	0	1	16	126	0	0	0	7	0	9	0	0	0	0	0	0	342
12:15 PM	0	0	136	37	0	0	10	144	0	0	0	16	0	16	0	0	0	0	0	0	359
12:30 PM	0	0	144	21	0	3	17	137	0	0	0	12	0	10	0	0	0	0	0	0	344
12:45 PM	0	0	143	35	0	0	16	112	0	0	0	20	0	13	0	0	0	0	0	0	339
1:00 PM	0	0	129	22	0	0	13	137	0	0	0	11	0	5	0	0	0	0	0	0	317
1:15 PM	0	0	123	23	0	0	9	123	0	0	0	11	0	8	0	0	0	0	0	0	297
1:30 PM	0	0	132	15	0	1	8	133	0	0	0	14	0	9	0	0	0	0	0	0	312
1:45 PM	0	0	134	10	0	0	9	118	0	0	0	8	0	7	0	0	0	0	0	0	286
Mediums																					
11:00 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
11:15 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
11:30 AM	0	0	5	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	14
11:45 AM	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	9
12:15 PM	0	0	4	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11
12:30 PM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
12:45 PM	0	0	6	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	13
1:00 PM	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
1:15 PM	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
1:30 PM	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	12
1:45 PM	0	0	6	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	12
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	2	0	2	0	0	0	0	1	1	0	0	0
11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	1	0	0	0	1	0	1	0	0	0
12:00 PM	2	0	2	0	0	0	0	1	1	0	0	0
12:15 PM	1	0	1	0	0	0	0	1	1	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	1	0	1	1	1	2	3	0	0	0
1:00 PM	0	0	0	0	1	1	0	0	0	0	1	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	1	1	1	0	1	1	0	1
1:45 PM	1	0	1	0	0	0	0	0	0	2	0	2

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	5	5	10	6	9	15	9	5	14	0	5	5
11:15 AM	4	3	7	3	5	8	4	8	12	0	3	3
11:30 AM	2	2	4	4	10	14	2	5	7	1	4	5
11:45 AM	2	4	6	3	12	15	13	11	24	2	6	8
12:00 PM	13	5	18	9	20	29	18	7	25	2	7	9
12:15 PM	8	15	23	7	14	21	5	5	10	3	8	11
12:30 PM	6	5	11	17	7	24	9	6	15	1	5	6
12:45 PM	7	11	18	22	6	28	11	9	20	2	4	6
1:00 PM	7	6	13	14	7	21	3	11	14	3	7	10
1:15 PM	2	9	11	4	3	7	6	6	12	1	4	5
1:30 PM	3	7	10	1	7	8	6	7	13	0	3	3
1:45 PM	10	10	20	6	5	11	9	6	15	2	5	7

All Traffic Data Services

19 CORNELL DR & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:15 PM - 06:15 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					CORNELL DR					CORNELL DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	139	18	0	1	5	148	0	0	0	5	0	6	0	0	0	0	0	0	322	1,260
3:45 PM	0	0	138	11	0	0	7	110	0	0	0	7	0	5	0	0	0	0	0	0	278	1,218
4:00 PM	0	0	165	18	0	0	8	143	0	0	0	9	0	2	0	0	0	0	0	0	345	1,257
4:15 PM	0	0	141	13	0	0	9	133	0	0	0	6	0	13	0	0	0	0	0	0	315	1,230
4:30 PM	0	0	129	12	0	0	8	122	0	0	0	3	0	6	0	0	0	0	0	0	280	1,256
4:45 PM	0	0	143	26	0	0	3	129	0	0	0	11	0	5	0	0	0	0	0	0	317	1,293
5:00 PM	0	0	148	10	0	1	9	143	0	0	0	1	0	6	0	0	0	0	0	0	318	1,293
5:15 PM	0	0	167	10	0	0	13	139	0	0	0	7	0	5	0	0	0	0	0	0	341	1,302
5:30 PM	1	0	140	21	0	0	10	136	0	0	0	4	0	5	0	0	0	0	0	0	317	1,230
5:45 PM	0	0	152	15	0	1	6	124	0	0	0	9	0	10	0	0	0	0	0	0	317	0
6:00 PM	0	0	152	20	0	1	11	130	0	0	0	4	0	9	0	0	0	0	0	0	327	0
6:15 PM	0	0	121	18	0	0	3	118	0	0	0	3	0	6	0	0	0	0	0	0	269	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	1	0	600	66	0	2	40	520	0	0	0	24	0	29	0	0	0	0	0	0	1,282
Mediums	0	0	11	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	20
Total	1	0	611	66	0	2	40	529	0	0	0	24	0	29	0	0	0	0	0	0	1,302
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	5
Bicycles on Crosswalk			4					3					4					1			12
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.96					0.95					0.72					0.00			0.95
Peak Hour Factor (PHF)	0.25	0.00	0.91	0.88	0.00	0.50	0.77	0.96	0.00	0.00	0.00	0.66	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	136	18	0	1	5	145	0	0	0	5	0	6	0	0	0	0	0	0	316
3:45 PM	0	0	135	11	0	0	7	107	0	0	0	7	0	5	0	0	0	0	0	0	272
4:00 PM	0	0	159	18	0	0	7	140	0	0	0	9	0	2	0	0	0	0	0	0	335
4:15 PM	0	0	140	13	0	0	9	128	0	0	0	6	0	13	0	0	0	0	0	0	309
4:30 PM	0	0	126	12	0	0	8	120	0	0	0	3	0	6	0	0	0	0	0	0	275
4:45 PM	0	0	141	25	0	0	3	123	0	0	0	11	0	5	0	0	0	0	0	0	308
5:00 PM	0	0	144	10	0	1	9	138	0	0	0	1	0	6	0	0	0	0	0	0	309
5:15 PM	0	0	164	10	0	0	13	137	0	0	0	7	0	5	0	0	0	0	0	0	336
5:30 PM	1	0	137	21	0	0	10	134	0	0	0	4	0	5	0	0	0	0	0	0	312
5:45 PM	0	0	152	15	0	1	6	122	0	0	0	9	0	10	0	0	0	0	0	0	315
6:00 PM	0	0	147	20	0	1	11	127	0	0	0	4	0	9	0	0	0	0	0	0	319
6:15 PM	0	0	118	18	0	0	3	116	0	0	0	3	0	6	0	0	0	0	0	0	264
Mediums																					
3:30 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
4:00 PM	0	0	5	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	9
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	2	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
5:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
5:15 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
6:15 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	1	0	1	0	0	0
3:45 PM	0	0	0	0	0	0	1	0	1	1	1	2
4:00 PM	3	1	4	0	0	0	0	2	2	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	1	1	1	3	4	1	0	1
4:45 PM	5	1	6	0	0	0	2	3	5	2	0	2
5:00 PM	2	0	2	1	0	1	1	2	3	0	0	0
5:15 PM	0	1	1	1	0	1	1	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	1	0	1	1	0	1	0	1	1	0	0	0
6:00 PM	2	0	2	1	0	1	1	0	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	5	5	10	3	3	6	2	6	8	2	2	4
3:45 PM	9	3	12	1	1	2	5	3	8	1	2	3
4:00 PM	14	4	18	2	5	7	6	1	7	2	5	7
4:15 PM	1	7	8	2	3	5	3	4	7	0	1	1
4:30 PM	13	6	19	8	1	9	5	4	9	6	2	8
4:45 PM	11	4	15	5	11	16	12	5	17	1	9	10
5:00 PM	15	5	20	4	13	17	11	7	18	2	1	3
5:15 PM	13	3	16	1	11	12	2	3	5	2	0	2
5:30 PM	7	6	13	4	6	10	4	5	9	0	1	1
5:45 PM	5	9	14	17	4	21	5	7	12	3	0	3
6:00 PM	14	7	21	8	17	25	3	5	8	0	3	3
6:15 PM	12	3	15	9	11	20	4	6	10	7	0	7

All Traffic Data Services

20 YALE BLVD & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	18	6	0	0	6	21	0	0	0	4	1	4	0	0	1	0	0	0	61	404
6:15 AM	0	1	32	9	0	0	5	33	0	0	0	7	0	3	0	0	0	0	0	0	90	464
6:30 AM	0	1	33	10	0	0	9	44	1	0	0	8	1	8	0	0	1	3	0	0	119	517
6:45 AM	0	0	39	11	0	0	8	54	1	0	0	10	2	8	0	0	1	0	0	0	134	606
7:00 AM	1	1	40	11	0	0	8	42	1	0	0	3	3	7	0	1	1	2	0	0	121	691
7:15 AM	0	1	48	13	0	0	8	48	0	0	0	10	4	8	0	0	1	1	1	0	143	797
7:30 AM	1	5	63	13	0	0	16	76	1	0	0	12	4	11	0	0	1	3	2	0	208	863
7:45 AM	0	2	62	18	0	0	11	72	4	0	0	18	8	20	0	0	1	1	2	0	219	890
8:00 AM	0	2	74	22	0	0	9	66	0	0	0	23	4	14	0	0	3	7	3	0	227	879
8:15 AM	0	2	82	16	0	0	9	57	1	0	0	20	3	16	0	0	2	1	0	0	209	0
8:30 AM	1	4	84	22	0	2	11	70	1	0	0	18	4	15	0	0	0	2	1	0	235	0
8:45 AM	0	1	72	15	0	0	7	75	1	0	0	12	4	14	0	0	4	2	1	0	208	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3
Lights	1	8	287	76	0	2	38	250	6	0	0	77	14	65	0	0	6	9	6	0	845
Mediums	0	2	14	2	0	0	2	14	0	0	0	1	5	0	0	0	0	2	0	0	42
Total	1	10	302	78	0	2	40	265	6	0	0	79	19	65	0	0	6	11	6	0	890
Bicycles on Road	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	1	0	5
Bicycles on Crosswalk			3					1					0					0			4
Heavy Vehicle Percentage			0.3%					0.3%					0.6%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.89					0.87					0.89					0.50			0.95
Peak Hour Factor (PHF)	0.50	0.55	0.93	0.89	0.00	0.25	0.70	0.89	0.38	0.00	0.00	0.86	0.63	0.81	0.00	0.25	0.56	0.43	0.67	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	17	6	0	0	6	20	0	0	0	4	1	3	0	0	1	0	0	0	58
6:15 AM	0	1	28	8	0	0	5	30	0	0	0	7	0	3	0	0	0	0	0	0	82
6:30 AM	0	0	29	9	0	0	9	39	1	0	0	7	1	8	0	0	1	3	0	0	107
6:45 AM	0	0	37	10	0	0	8	51	1	0	0	9	1	8	0	0	1	0	0	0	126
7:00 AM	1	1	37	11	0	0	8	38	1	0	0	2	2	6	0	0	1	2	0	0	110
7:15 AM	0	1	43	13	0	0	7	46	0	0	0	10	3	8	0	0	1	0	1	0	133
7:30 AM	1	5	61	13	0	0	15	72	1	0	0	12	3	10	0	0	1	2	2	0	198
7:45 AM	0	1	59	18	0	0	11	67	4	0	0	17	7	20	0	0	1	1	2	0	208
8:00 AM	0	2	70	21	0	0	8	64	0	0	0	23	2	14	0	0	3	7	3	0	217
8:15 AM	0	1	76	16	0	0	9	53	1	0	0	19	3	16	0	0	2	0	0	0	196
8:30 AM	1	4	82	21	0	2	10	66	1	0	0	18	2	15	0	0	0	1	1	0	224
8:45 AM	0	1	68	14	0	0	7	70	1	0	0	12	3	13	0	0	3	1	0	0	193
Mediums																					
6:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3
6:15 AM	0	0	4	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
6:30 AM	0	1	3	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	10
6:45 AM	0	0	2	1	0	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	8
7:00 AM	0	0	3	0	0	0	0	4	0	0	0	0	1	1	0	1	0	0	0	0	10
7:15 AM	0	0	5	0	0	0	1	2	0	0	0	0	1	0	0	0	0	1	0	0	10
7:30 AM	0	0	2	0	0	0	1	4	0	0	0	0	1	1	0	0	0	1	0	0	10
7:45 AM	0	1	3	0	0	0	0	5	0	0	0	1	1	0	0	0	0	0	0	0	11
8:00 AM	0	0	3	1	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	9
8:15 AM	0	1	6	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	12
8:30 AM	0	0	2	1	0	0	1	3	0	0	0	0	2	0	0	0	0	1	0	0	10
8:45 AM	0	0	4	1	0	0	0	5	0	0	0	0	1	1	0	0	1	1	1	0	15
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:45 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:00 AM	1	1	2	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:45 AM	0	0	0	2	0	2	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	1	2	1	0	1	0	1	1	1	1	2
6:15 AM	1	0	1	1	0	1	0	0	0	2	0	2
6:30 AM	0	0	0	4	0	4	0	1	1	1	0	1
6:45 AM	0	0	0	1	1	2	0	0	0	0	1	1
7:00 AM	0	0	0	4	0	4	0	0	0	3	0	3
7:15 AM	1	2	3	4	0	4	0	1	1	2	1	3
7:30 AM	0	0	0	0	2	2	0	0	0	0	0	0
7:45 AM	0	1	1	0	0	0	0	0	0	1	0	1
8:00 AM	1	1	2	0	2	2	0	0	0	2	0	2
8:15 AM	0	0	0	0	3	3	0	0	0	0	0	0
8:30 AM	0	3	3	4	2	6	0	0	0	2	0	2
8:45 AM	2	0	2	3	1	4	0	0	0	0	2	2

All Traffic Data Services

20 YALE BLVD & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	1	1	115	20	0	3	11	106	2	0	0	17	4	22	0	0	2	1	3	0	308	1,424
11:15 AM	3	2	124	24	0	3	15	120	2	0	0	19	4	29	0	0	1	3	7	0	356	1,505
11:30 AM	2	0	127	13	0	1	16	147	5	0	0	31	5	24	0	0	2	2	1	0	376	1,557
11:45 AM	0	8	153	12	0	7	25	111	0	0	0	29	4	22	0	0	5	5	3	0	384	1,557
12:00 PM	1	4	168	22	0	7	23	105	4	0	0	22	6	16	0	0	4	5	2	0	389	1,561
12:15 PM	1	2	143	24	0	2	21	142	3	0	0	35	5	24	0	0	2	3	1	0	408	1,554
12:30 PM	1	0	133	30	0	0	19	129	2	0	0	26	5	23	0	0	3	4	1	0	376	1,503
12:45 PM	1	5	138	20	0	4	21	122	0	0	0	35	7	24	0	0	3	7	1	0	388	1,458
1:00 PM	1	5	133	20	0	1	17	129	4	0	0	42	5	18	0	0	1	5	1	0	382	1,406
1:15 PM	1	8	119	14	0	3	20	124	4	0	0	30	5	20	0	0	4	3	2	0	357	0
1:30 PM	2	0	115	20	0	2	15	124	3	0	0	20	6	14	0	0	2	4	4	0	331	0
1:45 PM	1	1	114	22	0	3	20	115	1	0	0	19	8	24	0	0	1	2	5	0	336	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
Lights	4	11	564	91	0	13	81	476	9	0	0	116	17	86	0	0	12	17	5	0	1,502
Mediums	0	0	16	4	0	0	3	20	0	0	0	2	6	1	0	0	0	2	0	0	54
Total	4	11	582	96	0	13	84	498	9	0	0	118	23	87	0	0	12	19	5	0	1,561
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	2	0	0	7
Bicycles on Crosswalk			2					2					1					0			5
Heavy Vehicle Percentage			0.4%					0.3%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	1.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.90					0.92					0.94					0.77			0.96
Peak Hour Factor (PHF)	0.50	0.56	0.89	0.80	0.00	0.64	0.88	0.92	0.60	0.00	0.00	0.82	0.75	0.84	0.00	0.00	0.70	0.68	0.50	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	1	1	110	19	0	3	10	104	2	0	0	17	2	22	0	0	2	1	3	0	297
11:15 AM	3	1	120	24	0	3	14	116	2	0	0	19	4	27	0	0	1	2	7	0	343
11:30 AM	2	0	124	12	0	1	16	139	5	0	0	30	4	23	0	0	2	2	1	0	361
11:45 AM	0	8	148	12	0	7	25	104	0	0	0	29	3	22	0	0	5	3	3	0	369
12:00 PM	1	4	162	22	0	7	22	103	4	0	0	22	4	15	0	0	4	5	2	0	377
12:15 PM	1	2	140	21	0	2	20	136	3	0	0	34	3	24	0	0	2	2	1	0	391
12:30 PM	1	0	130	28	0	0	19	123	2	0	0	26	4	23	0	0	3	4	1	0	364
12:45 PM	1	5	132	20	0	4	20	114	0	0	0	34	6	24	0	0	3	6	1	0	370
1:00 PM	1	4	130	20	0	1	17	123	4	0	0	41	4	18	0	0	1	5	1	0	370
1:15 PM	1	8	116	14	0	3	20	118	4	0	0	30	3	19	0	0	4	1	2	0	343
1:30 PM	2	0	110	19	0	2	15	117	3	0	0	20	5	14	0	0	2	4	3	0	316
1:45 PM	1	1	108	21	0	3	19	111	1	0	0	19	6	24	0	0	1	2	5	0	322
Mediums																					
11:00 AM	0	0	4	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	9
11:15 AM	0	1	4	0	0	0	1	3	0	0	0	0	0	1	0	0	0	1	0	0	11
11:30 AM	0	0	3	1	0	0	0	8	0	0	0	0	1	1	0	0	0	0	0	0	14
11:45 AM	0	0	5	0	0	0	0	6	0	0	0	0	1	0	0	0	0	2	0	0	14
12:00 PM	0	0	6	0	0	0	1	2	0	0	0	0	2	1	0	0	0	0	0	0	12
12:15 PM	0	0	3	3	0	0	1	6	0	0	0	1	2	0	0	0	0	1	0	0	17
12:30 PM	0	0	2	1	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	10
12:45 PM	0	0	5	0	0	0	1	6	0	0	0	1	1	0	0	0	0	1	0	0	15
1:00 PM	0	1	3	0	0	0	0	5	0	0	0	1	1	0	0	0	0	0	0	0	11
1:15 PM	0	0	3	0	0	0	0	6	0	0	0	0	2	1	0	0	0	2	0	0	14
1:30 PM	0	0	5	0	0	0	0	6	0	0	0	0	1	0	0	0	0	0	1	0	13
1:45 PM	0	0	6	1	0	0	1	4	0	0	0	0	2	0	0	0	0	0	0	0	14
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	0	1	1
11:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	1	1	2	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
12:15 PM	0	0	0	1	1	2	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	1	2	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	0	0	0	0	1	1	2	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	7	7	1	1	2	2	1	3	1	0	1
11:15 AM	7	1	8	5	3	8	1	1	2	2	0	2
11:30 AM	2	6	8	1	2	3	2	0	2	1	0	1
11:45 AM	6	1	7	1	7	8	2	1	3	1	0	1
12:00 PM	2	5	7	4	3	7	0	2	2	0	1	1
12:15 PM	2	8	10	4	8	12	0	0	0	0	6	6
12:30 PM	7	2	9	8	5	13	5	0	5	2	0	2
12:45 PM	3	3	6	15	5	20	0	0	0	2	0	2
1:00 PM	3	5	8	6	6	12	4	3	7	0	1	1
1:15 PM	3	3	6	3	3	6	3	2	5	0	1	1
1:30 PM	1	1	2	7	2	9	1	2	3	1	0	1
1:45 PM	2	1	3	5	1	6	0	1	1	1	0	1

All Traffic Data Services

20 YALE BLVD & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	7	105	24	0	4	16	127	4	0	0	27	6	26	0	0	6	5	1	0	358	1,433
3:45 PM	0	9	105	25	0	2	24	102	2	0	0	22	2	23	0	0	5	4	5	0	330	1,392
4:00 PM	0	5	153	24	0	2	16	136	0	0	0	23	9	28	0	0	2	4	5	0	407	1,426
4:15 PM	0	2	123	17	0	2	23	113	0	0	0	23	3	20	0	0	4	6	2	0	338	1,412
4:30 PM	0	3	106	14	0	1	10	104	4	0	0	25	9	21	0	0	4	10	6	0	317	1,464
4:45 PM	0	5	137	23	0	2	29	108	2	0	0	16	7	27	0	0	3	5	0	0	364	1,487
5:00 PM	0	6	124	26	0	0	26	129	0	0	0	19	4	31	0	0	6	5	17	0	393	1,511
5:15 PM	0	3	146	19	0	0	19	130	3	0	0	33	5	15	0	0	5	7	5	0	390	1,493
5:30 PM	0	11	128	15	0	3	20	107	0	0	0	14	8	18	0	0	6	8	2	0	340	1,411
5:45 PM	0	8	131	23	0	2	26	118	1	0	0	26	8	17	0	0	12	8	8	0	388	0
6:00 PM	0	9	137	20	0	7	22	105	2	0	0	20	10	21	0	0	5	10	7	0	375	0
6:15 PM	0	9	110	18	0	6	19	96	1	0	0	14	6	18	0	0	3	4	4	0	308	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	27	519	82	0	5	90	474	4	0	0	91	21	80	0	0	29	26	31	0	1,479
Mediums	0	1	10	1	0	0	1	9	0	0	0	1	4	1	0	0	0	2	1	0	31
Total	0	28	529	83	0	5	91	484	4	0	0	92	25	81	0	0	29	28	32	0	1,511
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
Bicycles on Crosswalk			5					3					1					0			9
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.97					0.94					0.88					0.79			0.96
Peak Hour Factor (PHF)	0.00	0.84	0.93	0.90	0.00	0.64	0.81	0.93	0.56	0.00	0.00	0.88	0.80	0.80	0.00	0.00	0.60	0.83	0.47	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	7	103	24	0	4	16	124	4	0	0	27	4	26	0	0	5	4	1	0	349
3:45 PM	0	8	102	24	0	2	24	99	2	0	0	22	1	23	0	0	5	3	4	0	319
4:00 PM	0	5	148	23	0	2	16	133	0	0	0	23	7	28	0	0	2	3	5	0	395
4:15 PM	0	2	122	17	0	2	23	108	0	0	0	23	3	20	0	0	4	6	2	0	332
4:30 PM	0	3	103	13	0	1	10	101	4	0	0	25	7	21	0	0	4	10	6	0	308
4:45 PM	0	5	135	22	0	2	29	103	2	0	0	16	6	27	0	0	3	4	0	0	354
5:00 PM	0	6	120	26	0	0	26	124	0	0	0	19	2	30	0	0	6	5	17	0	381
5:15 PM	0	2	143	19	0	0	18	129	3	0	0	33	5	15	0	0	5	6	5	0	383
5:30 PM	0	11	125	15	0	3	20	106	0	0	0	13	7	18	0	0	6	8	2	0	334
5:45 PM	0	8	131	22	0	2	26	115	1	0	0	26	7	17	0	0	12	7	7	0	381
6:00 PM	0	9	132	20	0	7	22	102	2	0	0	20	9	21	0	0	5	10	7	0	366
6:15 PM	0	9	107	17	0	6	19	94	1	0	0	14	5	18	0	0	3	3	4	0	300
Mediums																					
3:30 PM	0	0	2	0	0	0	0	3	0	0	0	0	2	0	0	0	1	1	0	0	9
3:45 PM	0	1	3	1	0	0	0	3	0	0	0	0	1	0	0	0	0	1	1	0	11
4:00 PM	0	0	4	1	0	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	11
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	3	1	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	9
4:45 PM	0	0	2	1	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	9
5:00 PM	0	0	4	0	0	0	0	4	0	0	0	0	2	1	0	0	0	0	0	0	11
5:15 PM	0	1	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	7
5:30 PM	0	0	3	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	1	1	0	7
6:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	9
6:15 PM	0	0	3	1	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	8
Bicycles on Road																					
3:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	1	1	2	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	1	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	1	0	1	0	1	1	0	0	0
5:15 PM	2	1	3	0	1	1	0	0	0	0	0	0
5:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 PM	0	0	0	2	0	2	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	1	2	1	2	3	1	2	3	1	0	1
3:45 PM	2	1	3	0	1	1	0	1	1	0	0	0
4:00 PM	3	1	4	0	4	4	1	3	4	2	0	2
4:15 PM	4	1	5	3	0	3	0	0	0	0	2	2
4:30 PM	7	1	8	3	2	5	1	2	3	0	1	1
4:45 PM	3	1	4	1	2	3	0	0	0	0	0	0
5:00 PM	1	1	2	2	2	4	0	0	0	3	0	3
5:15 PM	7	2	9	1	1	2	1	1	2	1	3	4
5:30 PM	0	2	2	2	1	3	0	2	2	1	1	2
5:45 PM	0	0	0	1	5	6	1	0	1	1	0	1
6:00 PM	2	2	4	3	3	6	0	0	0	0	0	0
6:15 PM	1	3	4	2	2	4	0	0	0	0	0	0

All Traffic Data Services

21 UNIVERSITY BLVD & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	2	11	3	0	0	2	18	4	0	0	1	11	1	0	0	13	9	6	0	81	607
6:15 AM	0	1	30	2	0	1	6	25	11	0	1	0	17	6	0	0	8	13	5	0	126	708
6:30 AM	0	4	30	1	0	0	8	28	14	0	0	2	30	9	0	0	14	39	3	0	182	856
6:45 AM	0	5	32	2	0	1	4	49	16	0	0	2	38	7	0	0	14	41	7	0	218	1,039
7:00 AM	0	4	33	4	0	1	3	26	12	0	0	4	28	5	0	0	12	38	12	0	182	1,233
7:15 AM	1	8	42	5	0	2	7	30	22	0	0	5	43	12	0	0	21	64	12	0	274	1,428
7:30 AM	0	3	47	5	0	0	10	56	27	0	0	10	95	11	0	0	18	63	20	0	365	1,511
7:45 AM	0	6	41	3	0	1	9	54	28	0	0	7	122	11	0	0	34	87	9	0	412	1,513
8:00 AM	1	10	56	6	0	1	11	54	35	0	0	4	78	12	0	0	31	69	9	0	377	1,440
8:15 AM	0	7	74	5	0	2	4	38	30	0	0	6	77	8	0	0	27	71	8	0	357	0
8:30 AM	0	10	65	4	0	1	7	47	40	0	3	5	63	10	0	0	40	64	8	0	367	0
8:45 AM	2	8	72	6	0	1	14	47	21	0	1	7	59	10	0	0	20	59	12	0	339	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	4
Lights	1	31	221	17	0	5	27	182	127	0	3	22	332	41	0	0	129	286	31	0	1,455
Mediums	0	2	14	1	0	0	4	10	5	0	0	0	7	0	0	0	3	5	3	0	54
Total	1	33	236	18	0	5	31	193	133	0	3	22	340	41	0	0	132	291	34	0	1,513
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					2					0					2			4
Heavy Vehicle Percentage			0.3%					0.6%					0.2%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.8%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.93					0.90					0.79					0.88			0.92
Peak Hour Factor (PHF)	0.38	0.88	0.90	0.88	0.00	0.63	0.84	0.90	0.83	0.00	0.33	0.68	0.76	0.96	0.00	0.00	0.83	0.84	0.66	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	2	10	3	0	0	2	17	4	0	0	1	11	1	0	0	13	8	5	0	77
6:15 AM	0	1	25	2	0	1	5	23	11	0	1	0	15	6	0	0	8	13	5	0	116
6:30 AM	0	4	27	1	0	0	7	22	14	0	0	2	30	9	0	0	12	35	3	0	166
6:45 AM	0	5	28	2	0	1	3	46	15	0	0	2	37	7	0	0	14	38	6	0	204
7:00 AM	0	4	28	4	0	1	2	23	11	0	0	4	28	5	0	0	12	36	12	0	170
7:15 AM	1	8	39	5	0	2	7	28	22	0	0	5	43	12	0	0	21	61	12	0	266
7:30 AM	0	3	45	5	0	0	9	52	27	0	0	9	93	11	0	0	17	62	20	0	353
7:45 AM	0	6	38	3	0	1	8	52	26	0	0	7	119	11	0	0	33	86	8	0	398
8:00 AM	1	9	51	6	0	1	10	51	35	0	0	4	76	12	0	0	31	68	9	0	364
8:15 AM	0	7	69	5	0	2	3	35	26	0	0	6	74	8	0	0	26	69	6	0	336
8:30 AM	0	9	63	3	0	1	6	44	40	0	3	5	63	10	0	0	39	63	8	0	357
8:45 AM	2	8	66	6	0	1	13	44	19	0	1	7	58	10	0	0	20	59	11	0	325
Mediums																					
6:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
6:15 AM	0	0	5	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	10
6:30 AM	0	0	2	0	0	0	1	5	0	0	0	0	0	0	0	0	2	2	0	0	12
6:45 AM	0	0	4	0	0	0	1	3	1	0	0	0	1	0	0	0	0	3	1	0	14
7:00 AM	0	0	5	0	0	0	1	3	0	0	0	0	0	0	0	0	0	1	0	0	10
7:15 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	8
7:30 AM	0	0	2	0	0	0	1	4	0	0	0	1	2	0	0	0	1	1	0	0	12
7:45 AM	0	0	3	0	0	0	1	2	2	0	0	0	3	0	0	0	1	1	1	0	14
8:00 AM	0	1	4	0	0	0	1	3	0	0	0	0	1	0	0	0	0	1	0	0	11
8:15 AM	0	0	5	0	0	0	1	3	3	0	0	0	3	0	0	0	1	2	2	0	20
8:30 AM	0	1	2	1	0	0	1	2	0	0	0	0	0	0	0	0	1	1	0	0	9
8:45 AM	0	0	6	0	0	0	1	3	2	0	0	0	1	0	0	0	0	0	1	0	14
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	3	3	0	0	0	0	0	0
6:15 AM	0	0	0	1	3	4	1	1	2	1	3	4
6:30 AM	0	2	2	1	2	3	0	0	0	1	1	2
6:45 AM	1	0	1	1	1	2	1	0	1	0	2	2
7:00 AM	0	0	0	2	3	5	0	0	0	0	0	0
7:15 AM	1	0	1	2	2	4	1	2	3	1	1	2
7:30 AM	2	0	2	4	6	10	1	0	1	0	2	2
7:45 AM	0	1	1	1	4	5	0	1	1	1	2	3
8:00 AM	2	0	2	5	3	8	3	2	5	2	1	3
8:15 AM	0	1	1	5	1	6	2	1	3	0	0	0
8:30 AM	1	0	1	4	4	8	0	1	1	1	0	1
8:45 AM	0	3	3	2	2	4	0	0	0	1	4	5

All Traffic Data Services

21 UNIVERSITY BLVD & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
11:30 AM - 12:30 PM
Peak 15-Minutes
11:30 AM - 11:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	16	80	6	0	1	13	78	37	0	1	7	49	22	0	0	53	66	8	0	437	1,993
11:15 AM	0	14	79	5	0	3	11	98	36	0	2	9	61	13	0	1	59	59	10	0	460	2,114
11:30 AM	3	16	88	8	0	5	10	115	56	0	1	12	73	14	0	1	70	82	9	0	563	2,211
11:45 AM	2	10	109	5	0	3	11	101	34	0	0	5	78	23	0	1	62	75	14	0	533	2,190
12:00 PM	6	13	106	2	0	6	12	86	40	0	0	11	65	19	0	0	81	93	18	0	558	2,180
12:15 PM	4	8	95	1	0	6	14	99	67	0	0	9	70	19	0	0	66	87	12	0	557	2,164
12:30 PM	3	7	89	10	0	3	12	102	48	0	0	6	75	26	0	0	60	87	14	0	542	2,098
12:45 PM	2	21	91	5	0	5	8	88	58	0	1	6	73	16	0	0	59	77	13	0	523	2,006
1:00 PM	2	13	103	16	0	5	18	102	59	0	1	8	64	11	0	0	51	73	16	0	542	1,936
1:15 PM	1	17	82	5	0	7	14	98	42	0	0	12	78	14	0	0	39	72	10	0	491	0
1:30 PM	1	7	74	7	0	4	12	99	43	0	0	8	52	11	0	0	49	64	19	0	450	0
1:45 PM	0	12	81	4	0	4	14	86	42	0	0	8	70	12	0	0	42	70	8	0	453	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	5
Lights	15	47	378	16	0	20	43	380	192	0	1	35	281	74	0	2	276	330	52	0	2,142
Mediums	0	0	19	0	0	0	4	21	3	0	0	2	4	1	0	0	2	7	1	0	64
Total	15	47	398	16	0	20	47	401	197	0	1	37	286	75	0	2	279	337	53	0	2,211
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					4					2					0			6
Heavy Vehicle Percentage			0.2%					0.3%					0.3%					0.1%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.94					0.93					0.95					0.87			0.98
Peak Hour Factor (PHF)	0.63	0.69	0.92	0.56	0.00	0.75	0.81	0.87	0.87	0.00	0.50	0.77	0.93	0.84	0.00	0.75	0.86	0.92	0.76	0.00	0.98

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
11:45 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	16	77	6	0	1	13	76	36	0	1	6	48	21	0	0	52	64	8	0	425
11:15 AM	0	14	76	5	0	3	11	94	36	0	1	8	61	12	0	1	58	58	9	0	447
11:30 AM	3	16	85	8	0	5	9	106	54	0	1	12	71	14	0	1	70	79	9	0	543
11:45 AM	2	10	102	5	0	3	9	98	32	0	0	4	76	22	0	1	62	73	14	0	513
12:00 PM	6	13	101	2	0	6	11	83	40	0	0	11	65	19	0	0	80	92	18	0	547
12:15 PM	4	8	90	1	0	6	14	93	66	0	0	8	69	19	0	0	64	86	11	0	539
12:30 PM	3	7	86	9	0	3	9	98	48	0	0	6	73	26	0	0	57	86	13	0	524
12:45 PM	2	21	87	4	0	5	7	82	55	0	1	6	73	16	0	0	59	74	13	0	505
1:00 PM	2	12	98	16	0	4	16	97	58	0	1	8	64	11	0	0	51	71	16	0	525
1:15 PM	1	17	80	5	0	7	14	92	41	0	0	11	74	14	0	0	38	69	10	0	473
1:30 PM	1	7	71	7	0	4	11	93	43	0	0	8	52	11	0	0	49	63	19	0	439
1:45 PM	0	12	76	4	0	4	12	82	41	0	0	8	69	12	0	0	41	69	8	0	438
Mediums																					
11:00 AM	0	0	3	0	0	0	0	2	1	0	0	1	1	1	0	0	0	2	0	0	11
11:15 AM	0	0	3	0	0	0	0	3	0	0	1	1	0	1	0	0	1	1	1	0	12
11:30 AM	0	0	3	0	0	0	1	9	1	0	0	0	1	0	0	0	0	3	0	0	18
11:45 AM	0	0	6	0	0	0	2	3	1	0	0	1	2	1	0	0	0	2	0	0	18
12:00 PM	0	0	5	0	0	0	1	3	0	0	0	0	0	0	0	0	1	1	0	0	11
12:15 PM	0	0	5	0	0	0	0	6	1	0	0	1	1	0	0	0	1	1	1	0	17
12:30 PM	0	0	3	1	0	0	3	4	0	0	0	0	2	0	0	0	2	1	1	0	17
12:45 PM	0	0	4	1	0	0	1	5	2	0	0	0	0	0	0	0	0	3	0	0	16
1:00 PM	0	1	5	0	0	1	2	4	1	0	0	0	0	0	0	0	0	2	0	0	16
1:15 PM	0	0	2	0	0	0	0	6	1	0	0	1	3	0	0	0	0	3	0	0	16
1:30 PM	0	0	3	0	0	0	1	5	0	0	0	0	0	0	0	0	0	1	0	0	10
1:45 PM	0	0	5	0	0	0	2	4	1	0	0	0	1	0	0	0	1	1	0	0	15
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:15 AM	1	0	1	1	0	1	0	0	0	1	0	1
11:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	1	2	3	0	1	1	0	0	0
12:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:45 PM	1	0	1	0	1	1	0	1	1	1	0	1
1:00 PM	0	0	0	1	1	2	0	0	0	0	0	0
1:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
1:45 PM	0	0	0	0	0	0	0	1	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	1	2	2	3	5	1	0	1	1	2	3
11:15 AM	1	4	5	2	4	6	2	0	2	3	0	3
11:30 AM	0	0	0	3	1	4	2	0	2	0	1	1
11:45 AM	2	2	4	0	6	6	0	4	4	5	5	10
12:00 PM	1	0	1	4	2	6	10	2	12	1	1	2
12:15 PM	1	0	1	0	4	4	0	1	1	2	2	4
12:30 PM	2	0	2	8	0	8	4	0	4	0	1	1
12:45 PM	0	0	0	3	2	5	1	2	3	1	1	2
1:00 PM	0	0	0	3	3	6	1	0	1	0	0	0
1:15 PM	0	0	0	5	7	12	2	2	4	1	0	1
1:30 PM	1	0	1	6	3	9	1	0	1	2	0	2
1:45 PM	0	0	0	2	4	6	0	2	2	0	0	0

All Traffic Data Services

21 UNIVERSITY BLVD & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	2	9	83	4	0	4	10	105	44	0	0	11	88	14	0	0	38	89	8	0	509	2,026
3:45 PM	2	12	91	4	0	3	7	72	44	0	0	18	96	9	0	0	44	107	12	0	521	2,042
4:00 PM	2	12	107	4	0	7	10	108	38	0	0	10	70	22	0	0	58	92	10	0	550	2,044
4:15 PM	2	12	78	7	0	3	16	95	31	0	0	6	76	7	0	0	47	54	12	0	446	2,091
4:30 PM	0	10	85	7	0	1	11	94	31	0	0	12	83	7	0	0	33	134	17	0	525	2,233
4:45 PM	1	17	113	5	0	2	9	99	29	0	0	8	80	12	0	0	43	89	16	0	523	2,172
5:00 PM	1	14	91	5	0	6	18	98	38	0	0	16	96	14	0	0	51	127	22	0	597	2,123
5:15 PM	1	12	131	4	0	1	9	110	50	0	0	10	79	21	0	0	44	99	17	0	588	1,987
5:30 PM	2	11	86	4	0	2	11	96	28	0	0	9	45	19	0	0	54	85	12	0	464	1,771
5:45 PM	6	8	91	4	0	5	13	90	44	0	1	12	44	9	0	0	50	73	24	0	474	0
6:00 PM	4	16	114	7	0	2	5	86	42	0	1	8	57	16	0	0	37	55	11	0	461	0
6:15 PM	2	10	85	4	0	2	8	82	25	0	0	5	36	15	0	0	42	47	9	0	372	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	3	53	408	19	0	10	44	389	146	0	0	46	331	54	0	0	166	445	69	0	2,183
Mediums	0	0	12	1	0	0	3	10	2	0	0	0	7	0	0	0	5	4	3	0	47
Total	3	53	420	21	0	10	47	401	148	0	0	46	338	54	0	0	171	449	72	0	2,233
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					2					3					1			6
Heavy Vehicle Percentage			0.2%					0.3%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.85					0.91					0.87					0.87			0.94
Peak Hour Factor (PHF)	0.58	0.79	0.81	0.86	0.00	0.61	0.75	0.92	0.82	0.00	0.50	0.73	0.88	0.79	0.00	0.00	0.92	0.84	0.78	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	2	9	82	4	0	4	8	100	44	0	0	11	87	14	0	0	37	89	8	0	499
3:45 PM	2	12	87	4	0	3	6	69	42	0	0	18	93	9	0	0	43	106	11	0	505
4:00 PM	2	12	102	4	0	7	10	105	38	0	0	10	69	22	0	0	57	90	10	0	538
4:15 PM	2	12	77	7	0	3	14	91	31	0	0	6	73	7	0	0	46	54	12	0	435
4:30 PM	0	10	83	7	0	1	10	92	30	0	0	12	79	7	0	0	32	133	17	0	513
4:45 PM	1	17	110	4	0	2	8	95	28	0	0	8	80	12	0	0	42	87	15	0	509
5:00 PM	1	14	87	4	0	6	17	94	38	0	0	16	95	14	0	0	51	127	21	0	585
5:15 PM	1	12	128	4	0	1	9	108	50	0	0	10	77	21	0	0	41	98	16	0	576
5:30 PM	2	11	85	4	0	2	9	95	27	0	0	8	44	19	0	0	54	84	12	0	456
5:45 PM	6	8	91	4	0	5	11	87	43	0	1	10	44	9	0	0	49	73	23	0	464
6:00 PM	4	16	109	7	0	2	5	85	40	0	1	8	56	16	0	0	37	54	11	0	451
6:15 PM	2	10	81	4	0	2	8	80	25	0	0	5	35	14	0	0	42	46	8	0	362
Mediums																					
3:30 PM	0	0	1	0	0	0	2	5	0	0	0	0	1	0	0	0	1	0	0	0	10
3:45 PM	0	0	4	0	0	0	1	3	2	0	0	0	3	0	0	0	1	1	1	0	16
4:00 PM	0	0	5	0	0	0	0	3	0	0	0	0	1	0	0	0	0	2	0	0	11
4:15 PM	0	0	1	0	0	0	1	4	0	0	0	0	2	0	0	0	0	0	0	0	8
4:30 PM	0	0	2	0	0	0	1	2	1	0	0	0	4	0	0	0	1	1	0	0	12
4:45 PM	0	0	3	1	0	0	1	3	1	0	0	0	0	0	0	0	1	2	1	0	13
5:00 PM	0	0	4	0	0	0	1	3	0	0	0	0	1	0	0	0	0	0	1	0	10
5:15 PM	0	0	3	0	0	0	0	2	0	0	0	0	2	0	0	0	3	1	1	0	12
5:30 PM	0	0	1	0	0	0	2	1	1	0	0	1	1	0	0	0	0	1	0	0	8
5:45 PM	0	0	0	0	0	0	2	3	1	0	0	2	0	0	0	0	1	0	1	0	10
6:00 PM	0	0	5	0	0	0	0	1	2	0	0	0	1	0	0	0	0	1	0	0	10
6:15 PM	0	0	4	0	0	0	0	2	0	0	0	0	1	1	0	0	0	1	1	0	10
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	2	0	2	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:00 PM	0	0	0	1	1	2	1	0	1	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	1	1	0	0	0
4:45 PM	0	0	0	1	0	1	0	1	1	0	1	1
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	0	1	0	1	1	0	0	0	1	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	4	6	10	0	2	2	1	0	1
3:45 PM	2	1	3	3	1	4	2	0	2	1	0	1
4:00 PM	2	0	2	5	7	12	2	1	3	2	2	4
4:15 PM	0	1	1	2	1	3	2	0	2	4	0	4
4:30 PM	2	0	2	1	2	3	0	2	2	1	0	1
4:45 PM	1	0	1	12	7	19	5	5	10	1	2	3
5:00 PM	0	0	0	5	7	12	2	1	3	1	1	2
5:15 PM	0	1	1	12	7	19	0	2	2	1	1	2
5:30 PM	0	0	0	8	5	13	1	2	3	2	3	5
5:45 PM	4	0	4	2	2	4	2	0	2	2	0	2
6:00 PM	1	0	1	5	2	7	2	0	2	2	1	3
6:15 PM	0	1	1	3	3	6	4	0	4	0	1	1

All Traffic Data Services

22 SPRUCE ST & CENTRAL AVE AM
Thursday, May 23, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	CENTRAL AVE					CENTRAL AVE					SPRUCE ST					SPRUCE ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	13	43	0	0	2	22	0	0	0	8	0	4	0	0	0	0	0	0	92	645
6:15 AM	0	0	29	70	0	1	8	20	0	0	0	6	0	5	0	0	0	0	0	0	139	731
6:30 AM	0	0	32	91	0	0	7	26	0	0	0	12	0	3	0	0	0	0	0	0	171	771
6:45 AM	0	0	38	129	0	0	16	44	0	0	0	10	0	6	0	0	0	0	0	0	243	829
7:00 AM	0	0	37	71	0	1	8	42	0	0	0	13	0	6	0	0	0	0	0	0	178	811
7:15 AM	0	0	45	69	0	0	8	36	0	0	0	17	0	4	0	0	0	0	0	0	179	840
7:30 AM	1	0	51	74	0	0	10	63	0	0	0	21	0	9	0	0	0	0	0	0	229	880
7:45 AM	1	0	45	72	0	1	16	56	0	0	0	26	0	8	0	0	0	0	0	0	225	864
8:00 AM	0	0	55	51	0	5	20	58	0	0	0	11	0	7	0	0	0	0	0	0	207	836
8:15 AM	1	0	83	52	0	0	10	49	0	0	0	15	0	9	0	0	0	0	0	0	219	0
8:30 AM	0	0	72	68	0	0	11	46	0	0	0	11	0	5	0	0	0	0	0	0	213	0
8:45 AM	0	0	66	43	0	0	7	60	0	0	0	11	0	10	0	0	0	0	0	0	197	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	2	0	216	244	0	6	56	211	0	0	0	71	0	33	0	0	0	0	0	0	839
Mediums	1	0	17	4	0	0	0	15	0	0	0	2	0	0	0	0	0	0	0	0	39
Total	3	0	234	249	0	6	56	226	0	0	0	73	0	33	0	0	0	0	0	0	880
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			1					0					1					2			4
Heavy Vehicle Percentage			0.4%					0.0%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.77					0.87					0.78					0.00			0.96
Peak Hour Factor (PHF)	0.75	0.00	0.83	0.70	0.00	0.30	0.71	0.90	0.00	0.00	0.00	0.74	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	0	12	43	0	0	2	19	0	0	0	8	0	4	0	0	0	0	0	0	88
6:15 AM	0	0	24	70	0	1	8	18	0	0	0	6	0	5	0	0	0	0	0	0	132
6:30 AM	0	0	29	90	0	0	7	20	0	0	0	12	0	3	0	0	0	0	0	0	161
6:45 AM	0	0	34	129	0	0	16	41	0	0	0	10	0	6	0	0	0	0	0	0	236
7:00 AM	0	0	33	71	0	1	8	38	0	0	0	13	0	6	0	0	0	0	0	0	170
7:15 AM	0	0	42	69	0	0	8	33	0	0	0	17	0	4	0	0	0	0	0	0	173
7:30 AM	0	0	48	74	0	0	10	58	0	0	0	21	0	9	0	0	0	0	0	0	220
7:45 AM	1	0	43	70	0	1	16	53	0	0	0	26	0	8	0	0	0	0	0	0	218
8:00 AM	0	0	48	49	0	5	20	57	0	0	0	11	0	7	0	0	0	0	0	0	197
8:15 AM	1	0	77	51	0	0	10	43	0	0	0	13	0	9	0	0	0	0	0	0	204
8:30 AM	0	0	68	67	0	0	11	44	0	0	0	11	0	5	0	0	0	0	0	0	206
8:45 AM	0	0	61	41	0	0	7	55	0	0	0	11	0	10	0	0	0	0	0	0	185
Mediums																					
6:00 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	0	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	7
6:30 AM	0	0	2	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
6:45 AM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
7:00 AM	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
7:15 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:30 AM	1	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
7:45 AM	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
8:00 AM	0	0	6	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9
8:15 AM	0	0	6	1	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	15
8:30 AM	0	0	4	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	7
8:45 AM	0	0	5	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:30 AM	0	1	1	0	0	0	0	1	1	0	1	1
6:45 AM	0	1	1	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	1	0	1	0	0	0	1	0	1	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	1	1	1	0	1
6:15 AM	1	2	3	0	0	0	0	0	0	2	0	2
6:30 AM	1	1	2	0	0	0	0	1	1	0	1	1
6:45 AM	1	0	1	0	0	0	0	1	1	0	1	1
7:00 AM	1	3	4	0	0	0	0	1	1	1	0	1
7:15 AM	4	1	5	0	0	0	0	1	1	1	2	3
7:30 AM	4	8	12	0	0	0	0	2	2	3	4	7
7:45 AM	1	1	2	0	1	1	2	0	2	1	2	3
8:00 AM	1	1	2	0	0	0	0	1	1	0	0	0
8:15 AM	4	0	4	3	0	3	3	2	5	0	0	0
8:30 AM	1	0	1	0	0	0	0	1	1	1	0	1
8:45 AM	0	1	1	0	0	0	1	3	4	0	0	0

All Traffic Data Services

22 SPRUCE ST & CENTRAL AVE Noon
Thursday, May 23, 2024

Peak Hour
12:15 PM - 01:15 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

Time	CENTRAL AVE Eastbound					CENTRAL AVE Westbound					SPRUCE ST Northbound					SPRUCE ST Southbound					Total	Rolling Hour
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR		
11:00 AM	2	0	82	39	0	1	16	72	0	0	0	20	0	16	0	0	0	0	0	0	248	1,135
11:15 AM	1	0	85	39	0	1	12	99	0	0	0	23	0	13	0	0	0	0	0	0	273	1,207
11:30 AM	0	0	99	40	0	2	16	113	0	0	0	25	0	18	0	0	0	0	0	0	313	1,225
11:45 AM	0	0	96	34	0	1	19	101	0	0	0	32	0	18	0	0	0	0	0	0	301	1,204
12:00 PM	3	0	96	37	0	2	14	103	0	0	0	39	0	26	0	0	0	0	0	0	320	1,236
12:15 PM	0	0	89	44	0	5	14	99	0	0	0	22	0	18	0	0	0	0	0	0	291	1,242
12:30 PM	0	0	88	35	0	3	16	117	0	0	0	21	0	12	0	0	0	0	0	0	292	1,231
12:45 PM	0	0	107	52	0	1	25	104	0	0	0	29	0	15	0	0	0	0	0	0	333	1,230
1:00 PM	0	0	118	43	0	2	11	120	0	0	0	19	0	13	0	0	0	0	0	0	326	1,191
1:15 PM	1	0	83	37	0	2	16	104	0	0	0	23	0	14	0	0	0	0	0	0	280	0
1:30 PM	0	0	84	42	0	4	11	115	0	0	0	27	0	8	0	0	0	0	0	0	291	0
1:45 PM	0	0	89	32	0	4	14	104	0	0	0	34	0	17	0	0	0	0	0	0	294	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	
Articulated Trucks	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	0	0	382	171	0	11	62	422	0	0	0	90	0	58	0	0	0	0	0	0	1,196
Mediums	0	0	19	2	0	0	4	16	0	0	0	1	0	0	0	0	0	0	0	0	42
Total	0	0	402	174	0	11	66	440	0	0	0	91	0	58	0	0	0	0	0	0	1,242
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					2					0					1			3
Heavy Vehicle Percentage			0.3%					0.4%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.89					0.96					0.76					0.00			0.93
Peak Hour Factor (PHF)	0.33	0.00	0.85	0.84	0.00	0.75	0.69	0.93	0.00	0.00	0.00	0.76	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.93

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	2	0	79	39	0	1	16	70	0	0	0	20	0	15	0	0	0	0	0	0	242
11:15 AM	1	0	81	37	0	1	12	92	0	0	0	23	0	13	0	0	0	0	0	0	260
11:30 AM	0	0	96	38	0	2	15	106	0	0	0	24	0	18	0	0	0	0	0	0	299
11:45 AM	0	0	88	34	0	1	19	98	0	0	0	32	0	18	0	0	0	0	0	0	290
12:00 PM	3	0	90	35	0	2	14	99	0	0	0	38	0	26	0	0	0	0	0	0	307
12:15 PM	0	0	84	43	0	5	13	95	0	0	0	22	0	18	0	0	0	0	0	0	280
12:30 PM	0	0	85	34	0	3	14	112	0	0	0	20	0	12	0	0	0	0	0	0	280
12:45 PM	0	0	101	51	0	1	24	100	0	0	0	29	0	15	0	0	0	0	0	0	321
1:00 PM	0	0	112	43	0	2	11	115	0	0	0	19	0	13	0	0	0	0	0	0	315
1:15 PM	1	0	81	37	0	2	16	98	0	0	0	23	0	14	0	0	0	0	0	0	272
1:30 PM	0	0	79	42	0	4	11	109	0	0	0	27	0	8	0	0	0	0	0	0	280
1:45 PM	0	0	84	32	0	4	14	100	0	0	0	34	0	17	0	0	0	0	0	0	285
Mediums																					
11:00 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	6
11:15 AM	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	12
11:30 AM	0	0	3	2	0	0	1	7	0	0	0	1	0	0	0	0	0	0	0	0	14
11:45 AM	0	0	7	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	0	0	6	2	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	13
12:15 PM	0	0	5	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	11
12:30 PM	0	0	3	1	0	0	2	5	0	0	0	1	0	0	0	0	0	0	0	0	12
12:45 PM	0	0	5	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	10
1:00 PM	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	9
1:15 PM	0	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
1:30 PM	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11
1:45 PM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:30 PM	1	0	1	0	0	0	1	0	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	2	3	0	0	0	2	0	2	0	0	0
11:15 AM	0	0	0	0	0	0	0	2	2	0	0	0
11:30 AM	1	2	3	0	0	0	2	1	3	2	1	3
11:45 AM	2	1	3	0	0	0	2	0	2	0	0	0
12:00 PM	2	0	2	0	0	0	2	0	2	0	0	0
12:15 PM	1	0	1	0	0	0	1	0	1	0	2	2
12:30 PM	2	1	3	0	0	0	0	0	0	2	0	2
12:45 PM	0	0	0	0	0	0	1	2	3	0	1	1
1:00 PM	0	0	0	1	0	1	0	0	0	1	0	1
1:15 PM	3	4	7	0	0	0	1	0	1	0	1	1
1:30 PM	4	2	6	0	0	0	1	1	2	0	1	1
1:45 PM	0	1	1	0	0	0	0	2	2	1	0	1

All Traffic Data Services

22 SPRUCE ST & CENTRAL AVE PM
Thursday, May 23, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

Time	CENTRAL AVE Eastbound					CENTRAL AVE Westbound					SPRUCE ST Northbound					SPRUCE ST Southbound					Total	Rolling Hour
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR		
3:30 PM	0	0	82	20	0	0	15	114	0	0	0	24	0	18	0	0	0	0	0	0	273	1,089
3:45 PM	0	0	90	16	0	3	6	99	0	0	0	27	0	18	0	0	1	0	0	0	260	1,109
4:00 PM	1	0	110	15	0	3	6	128	0	0	0	27	0	15	0	0	0	0	0	0	305	1,152
4:15 PM	2	0	78	14	0	3	3	106	0	0	0	31	0	14	0	0	0	0	0	0	251	1,156
4:30 PM	0	0	89	18	0	0	8	124	0	0	0	36	0	18	0	0	0	0	0	0	293	1,220
4:45 PM	2	0	113	20	0	1	7	116	0	0	0	24	0	20	0	0	0	0	0	0	303	1,191
5:00 PM	1	0	106	12	0	3	8	124	0	0	0	43	0	12	0	0	0	0	0	0	309	1,154
5:15 PM	1	0	118	13	0	2	6	139	0	0	0	22	0	14	0	0	0	0	0	0	315	1,132
5:30 PM	1	0	97	21	0	1	4	103	0	0	0	16	0	21	0	0	0	0	0	0	264	1,046
5:45 PM	0	0	115	5	0	2	16	110	0	0	0	13	0	5	0	0	0	0	0	0	266	0
6:00 PM	1	0	121	10	0	3	12	109	0	0	0	21	0	10	0	0	0	0	0	0	287	0
6:15 PM	0	0	93	14	0	2	5	85	0	0	0	16	0	14	0	0	0	0	0	0	229	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	
Articulated Trucks	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	4	0	412	63	0	6	27	488	0	0	0	125	0	64	0	0	0	0	0	0	1,189
Mediums	0	0	13	0	0	0	2	13	0	0	0	0	0	0	0	0	0	0	0	0	28
Total	4	0	426	63	0	6	29	503	0	0	0	125	0	64	0	0	0	0	0	0	1,220
Bicycles on Road	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0					0					4					1			5
Heavy Vehicle Percentage			0.2%					0.4%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.94					0.91					0.90					0.25			0.97
Peak Hour Factor (PHF)	0.63	0.00	0.93	0.84	0.00	0.75	0.59	0.90	0.00	0.00	0.00	0.78	0.00	0.80	0.00	0.00	0.25	0.00	0.00	0.00	0.97

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					Total
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	80	19	0	0	15	108	0	0	0	24	0	17	0	0	0	0	0	0	263
3:45 PM	0	0	86	16	0	3	5	95	0	0	0	27	0	18	0	0	1	0	0	0	251
4:00 PM	1	0	106	15	0	3	6	126	0	0	0	27	0	15	0	0	0	0	0	0	299
4:15 PM	2	0	78	14	0	3	3	102	0	0	0	31	0	14	0	0	0	0	0	0	247
4:30 PM	0	0	85	18	0	0	8	122	0	0	0	36	0	18	0	0	0	0	0	0	287
4:45 PM	2	0	109	20	0	1	7	110	0	0	0	24	0	20	0	0	0	0	0	0	293
5:00 PM	1	0	102	12	0	3	7	119	0	0	0	43	0	12	0	0	0	0	0	0	299
5:15 PM	1	0	116	13	0	2	5	137	0	0	0	22	0	14	0	0	0	0	0	0	310
5:30 PM	1	0	96	21	0	1	4	101	0	0	0	16	0	20	0	0	0	0	0	0	260
5:45 PM	0	0	115	5	0	2	16	105	0	0	0	12	0	5	0	0	0	0	0	0	260
6:00 PM	1	0	117	10	0	3	12	108	0	0	0	21	0	10	0	0	0	0	0	0	282
6:15 PM	0	0	90	14	0	2	5	82	0	0	0	16	0	14	0	0	0	0	0	0	223
Mediums																					
3:30 PM	0	0	2	1	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	10
3:45 PM	0	0	4	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	0	0	4	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	9
5:15 PM	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	6
6:00 PM	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	1	2	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1	1	0	1
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	1	0	1	0	0	0	0	0	0	0	0	0

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	2	0	2	0	0	0	0	1	1	0	0	0
3:45 PM	6	1	7	0	0	0	2	0	2	6	0	6
4:00 PM	3	1	4	4	0	4	4	0	4	0	0	0
4:15 PM	2	0	2	0	0	0	1	1	2	0	0	0
4:30 PM	0	8	8	0	1	1	2	1	3	0	2	2
4:45 PM	2	3	5	0	0	0	1	1	2	0	0	0
5:00 PM	6	3	9	0	0	0	0	1	1	0	0	0
5:15 PM	1	1	2	0	0	0	0	0	0	0	1	1
5:30 PM	1	1	2	0	0	0	1	1	2	3	0	3
5:45 PM	2	7	9	0	1	1	0	0	0	0	1	1
6:00 PM	0	2	2	0	0	0	0	1	1	0	2	2
6:15 PM	1	1	2	0	0	0	0	1	1	0	1	1

All Traffic Data Services

23 WASHINGTON ST & ZUNI RD AM
Wednesday, June 5, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	ZUNI RD					ZUNI RD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	29	24	3	0	0	0	25	8	0	0	3	18	1	0	0	3	0	1	0	115	500
6:15 AM	0	22	29	3	0	0	0	21	12	0	0	6	18	1	0	0	3	3	5	0	123	533
6:30 AM	0	7	39	2	0	0	1	49	2	0	0	1	6	2	0	0	4	3	3	0	119	605
6:45 AM	1	8	58	6	0	0	0	48	3	0	0	3	2	0	0	0	3	6	5	0	143	735
7:00 AM	1	5	59	2	0	0	1	48	2	0	0	4	7	0	0	0	5	5	9	0	148	858
7:15 AM	1	9	71	4	0	0	3	67	5	0	0	6	5	1	0	0	8	3	12	0	195	948
7:30 AM	0	16	89	6	0	0	2	85	2	0	0	7	16	2	0	0	5	8	11	0	249	977
7:45 AM	1	18	91	1	0	0	1	85	6	0	0	10	17	0	0	0	4	11	21	0	266	1,007
8:00 AM	1	17	73	4	0	0	1	86	8	0	0	8	12	3	0	0	3	14	8	0	238	967
8:15 AM	0	20	65	7	0	0	3	74	8	0	0	4	12	4	0	0	7	11	9	0	224	0
8:30 AM	3	23	74	5	0	0	1	97	6	0	0	9	17	2	0	0	9	19	14	0	279	0
8:45 AM	1	17	83	8	0	0	3	72	3	0	0	3	11	0	0	0	3	3	19	0	226	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	5	77	295	16	0	0	6	337	28	0	0	29	58	9	0	0	23	54	51	0	988
Mediums	0	1	8	1	0	0	0	5	0	0	0	2	0	0	0	0	0	1	1	0	19
Total	5	78	303	17	0	0	6	342	28	0	0	31	58	9	0	0	23	55	52	0	1,007
Bicycles on Road	0	1	1	0	0	0	0	0	0	0	0	0	6	0	0	0	1	5	1	0	15
Bicycles on Crosswalk			2					1					0					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.92					0.90					0.88					0.77			0.90
Peak Hour Factor (PHF)	0.42	0.85	0.89	0.75	0.00	0.00	0.67	0.88	0.88	0.00	0.00	0.78	0.85	0.56	0.00	0.00	0.64	0.72	0.63	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	29	24	2	0	0	0	25	8	0	0	3	18	1	0	0	3	0	1	0	114
6:15 AM	0	22	27	3	0	0	0	21	11	0	0	6	18	1	0	0	3	3	5	0	120
6:30 AM	0	7	38	2	0	0	1	46	1	0	0	1	6	1	0	0	4	3	3	0	113
6:45 AM	1	8	55	6	0	0	0	48	3	0	0	3	2	0	0	0	3	6	5	0	140
7:00 AM	1	5	59	2	0	0	1	47	2	0	0	4	6	0	0	0	5	5	9	0	146
7:15 AM	1	9	68	4	0	0	3	66	5	0	0	6	5	1	0	0	8	3	12	0	191
7:30 AM	0	16	89	6	0	0	2	84	2	0	0	7	16	2	0	0	5	8	10	0	247
7:45 AM	1	18	89	0	0	0	1	84	6	0	0	10	17	0	0	0	4	11	21	0	262
8:00 AM	1	17	72	4	0	0	1	85	8	0	0	7	12	3	0	0	3	13	8	0	234
8:15 AM	0	20	63	7	0	0	3	72	8	0	0	3	12	4	0	0	7	11	9	0	219
8:30 AM	3	22	71	5	0	0	1	96	6	0	0	9	17	2	0	0	9	19	13	0	273
8:45 AM	1	17	82	8	0	0	3	71	3	0	0	3	11	0	0	0	3	3	19	0	224
Mediums																					
6:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	5
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
7:15 AM	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
7:45 AM	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	4
8:15 AM	0	0	2	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	5
8:30 AM	0	1	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	6
8:45 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	1	0	6
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	5
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	1	1	0	0	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:30 AM	1	0	1	0	1	1	1	0	1	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	1	1	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	1	2	1	0	1	1	0	1	1	0	1
7:45 AM	1	0	1	2	0	2	1	1	2	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

23 WASHINGTON ST & ZUNI RD Noon
Wednesday, June 5, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	ZUNI RD					ZUNI RD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	22	72	4	0	0	6	94	21	0	0	11	13	0	0	0	11	9	21	0	284	1,236
11:15 AM	0	26	105	6	0	1	2	88	10	0	0	7	8	1	0	0	10	17	13	0	294	1,283
11:30 AM	0	25	117	3	0	1	2	94	16	0	0	6	13	2	0	0	9	17	20	0	325	1,308
11:45 AM	2	35	87	6	0	0	2	117	8	0	0	12	16	4	0	0	11	7	26	0	333	1,322
12:00 PM	1	25	97	3	0	1	6	105	10	0	0	6	15	2	0	0	12	20	28	0	331	1,355
12:15 PM	1	31	102	7	0	0	5	91	10	0	0	8	14	2	0	0	15	16	17	0	319	1,317
12:30 PM	1	27	109	5	0	0	2	90	12	0	0	7	11	2	0	0	20	12	41	0	339	1,320
12:45 PM	2	26	111	10	0	0	6	115	15	0	0	14	14	3	0	0	13	14	23	0	366	1,257
1:00 PM	2	23	86	11	0	0	4	95	0	0	0	7	12	2	0	0	9	23	19	0	293	1,175
1:15 PM	1	28	96	8	0	0	3	101	0	0	0	9	12	3	0	0	10	23	28	0	322	0
1:30 PM	0	22	86	4	0	0	3	90	0	0	0	3	12	2	0	0	12	16	26	0	276	0
1:45 PM	0	25	77	6	0	0	1	86	9	0	0	10	15	2	0	0	8	22	23	0	284	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Lights	5	109	415	25	0	1	19	393	46	0	0	35	53	9	0	0	60	61	108	0	1,339
Mediums	0	0	4	0	0	0	0	8	0	0	0	0	1	0	0	0	0	1	1	0	15
Total	5	109	419	25	0	1	19	401	47	0	0	35	54	9	0	0	60	62	109	0	1,355
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.94					0.86					0.78					0.80			0.93
Peak Hour Factor (PHF)	0.75	0.84	0.94	0.77	0.00	0.75	0.79	0.87	0.65	0.00	0.00	0.66	0.91	0.63	0.00	0.00	0.75	0.91	0.68	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	21	71	4	0	0	5	92	21	0	0	11	13	0	0	0	11	9	19	0	277
11:15 AM	0	26	103	6	0	1	2	88	10	0	0	7	8	1	0	0	9	16	13	0	290
11:30 AM	0	24	115	2	0	1	2	92	16	0	0	5	12	1	0	0	9	17	20	0	316
11:45 AM	2	35	86	6	0	0	2	115	8	0	0	12	16	4	0	0	11	7	25	0	329
12:00 PM	1	25	97	3	0	1	6	102	10	0	0	6	15	2	0	0	12	19	27	0	326
12:15 PM	1	31	98	7	0	0	5	89	10	0	0	8	14	2	0	0	15	16	17	0	313
12:30 PM	1	27	109	5	0	0	2	89	12	0	0	7	10	2	0	0	20	12	41	0	337
12:45 PM	2	26	111	10	0	0	6	113	14	0	0	14	14	3	0	0	13	14	23	0	363
1:00 PM	2	23	86	11	0	0	4	95	0	0	0	7	12	2	0	0	9	23	19	0	293
1:15 PM	1	28	95	8	0	0	3	98	0	0	0	9	12	3	0	0	10	23	28	0	318
1:30 PM	0	21	84	4	0	0	3	89	0	0	0	3	12	2	0	0	12	16	26	0	272
1:45 PM	0	25	77	6	0	0	1	85	9	0	0	10	15	2	0	0	8	22	23	0	283
Mediums																					
11:00 AM	0	1	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	2	0	7
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4
11:30 AM	0	1	2	1	0	0	0	2	0	0	0	1	1	1	0	0	0	0	0	0	9
11:45 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	4
12:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	1	0	5
12:15 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
1:30 PM	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
11:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:45 AM	0	0	0	0	2	2	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	2	1	3	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	1	1	2	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	1	1	0	1	0	0	0
1:30 PM	0	0	0	0	0	0	1	2	3	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

23 WASHINGTON ST & ZUNI RD PM
Wednesday, June 5, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	ZUNI RD					ZUNI RD					WASHINGTON ST					WASHINGTON ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	3	27	127	7	0	0	5	117	21	0	0	9	11	4	0	0	13	18	27	0	389	1,645
3:45 PM	2	35	136	2	0	1	3	144	12	0	0	12	19	6	0	0	16	16	13	0	417	1,700
4:00 PM	3	23	112	4	0	1	0	153	25	0	0	8	16	0	0	0	6	17	23	0	391	1,767
4:15 PM	0	42	123	3	0	1	4	162	24	0	0	10	19	3	0	0	9	24	24	0	448	1,861
4:30 PM	2	29	118	3	0	0	4	181	25	0	0	8	14	4	0	0	14	18	24	0	444	1,909
4:45 PM	2	37	137	2	0	0	4	197	10	0	0	9	17	3	0	0	9	29	28	0	484	1,850
5:00 PM	0	46	160	4	0	0	2	170	16	0	0	10	16	6	0	0	16	16	23	0	485	1,725
5:15 PM	0	41	161	9	0	0	2	166	15	0	0	13	14	3	0	0	23	23	26	0	496	1,648
5:30 PM	1	25	94	7	0	0	5	152	20	0	0	13	13	3	0	0	13	10	29	0	385	1,551
5:45 PM	3	21	89	7	0	0	6	131	12	0	0	10	22	0	0	0	15	14	29	0	359	0
6:00 PM	3	25	91	1	0	0	2	192	8	0	0	15	13	2	0	0	7	14	35	0	408	0
6:15 PM	0	18	99	6	0	0	5	180	10	0	0	11	13	0	0	0	6	24	27	0	399	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	4	153	574	18	0	0	12	706	66	0	0	40	61	16	0	0	62	86	100	0	1,898
Mediums	0	0	2	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	11
Total	4	153	576	18	0	0	12	714	66	0	0	40	61	16	0	0	62	86	101	0	1,909
Bicycles on Road	0	1	2	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.89					0.95					0.96					0.86			0.96
Peak Hour Factor (PHF)	0.67	0.84	0.89	0.75	0.00	0.75	0.75	0.91	0.86	0.00	0.00	0.85	0.89	0.67	0.00	0.00	0.73	0.76	0.86	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	3	27	127	7	0	0	5	116	21	0	0	9	11	4	0	0	13	18	27	0	388
3:45 PM	2	35	134	2	0	1	3	141	12	0	0	12	19	6	0	0	16	16	13	0	412
4:00 PM	3	22	112	4	0	1	0	151	25	0	0	8	16	0	0	0	6	17	22	0	387
4:15 PM	0	42	119	3	0	1	4	162	23	0	0	10	19	3	0	0	9	24	24	0	443
4:30 PM	2	29	118	3	0	0	4	175	25	0	0	8	14	4	0	0	14	18	24	0	438
4:45 PM	2	37	136	2	0	0	4	196	10	0	0	9	17	3	0	0	9	29	27	0	481
5:00 PM	0	46	160	4	0	0	2	169	16	0	0	10	16	6	0	0	16	16	23	0	484
5:15 PM	0	41	160	9	0	0	2	166	15	0	0	13	14	3	0	0	23	23	26	0	495
5:30 PM	1	25	93	5	0	0	5	151	20	0	0	13	13	3	0	0	13	10	29	0	381
5:45 PM	3	20	89	7	0	0	6	130	12	0	0	10	22	0	0	0	14	14	29	0	356
6:00 PM	3	25	90	1	0	0	2	190	8	0	0	15	13	2	0	0	7	14	35	0	405
6:15 PM	0	18	97	6	0	0	5	179	10	0	0	11	13	0	0	0	6	24	27	0	396
Mediums																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
4:00 PM	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	4
4:15 PM	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
4:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	3
6:00 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	3	3	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:45 PM	1	0	1	1	0	1	0	0	0	0	0	0
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:30 PM	0	0	0	0	1	1	0	0	0	0	3	3
5:45 PM	0	2	2	0	0	0	0	2	2	0	0	0
6:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

24 MORNINGSIDE DR & LEAD AVE AM
Wednesday, June 5, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
08:30 AM - 08:45 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	0	31	0	0	0	0	1	0	0	0	0	2	0	0	34	209
6:15 AM	0	0	0	0	0	0	1	31	0	0	0	1	0	0	0	0	0	0	0	0	33	253
6:30 AM	0	0	0	0	0	0	0	58	1	0	0	2	1	0	0	0	0	0	1	0	63	332
6:45 AM	0	0	0	0	0	0	0	64	0	0	0	4	3	0	0	0	0	2	6	0	79	410
7:00 AM	0	0	0	0	0	0	0	70	2	0	0	0	0	0	0	0	0	1	5	0	78	474
7:15 AM	0	0	0	0	0	0	1	89	0	0	0	3	4	0	0	0	0	4	11	0	112	524
7:30 AM	0	0	0	0	0	0	1	120	0	0	0	6	6	0	0	0	0	0	8	0	141	520
7:45 AM	0	0	0	0	0	0	0	128	1	0	0	2	1	0	0	0	0	2	9	0	143	535
8:00 AM	0	0	0	0	0	0	1	106	4	0	0	1	4	0	0	0	0	5	7	0	128	524
8:15 AM	0	0	0	0	0	0	0	87	1	0	0	1	1	0	0	0	0	4	14	0	108	0
8:30 AM	0	0	0	0	0	0	0	135	1	0	0	3	4	0	0	0	0	1	12	0	156	0
8:45 AM	0	0	0	0	0	0	1	107	1	0	0	3	4	0	0	0	0	4	12	0	132	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	1	449	7	0	0	7	10	0	0	0	0	11	42	0	527
Mediums	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	8
Total	0	0	0	0	0	0	1	456	7	0	0	7	10	0	0	0	0	12	42	0	535
Bicycles on Road	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.85					0.56					0.82			0.86
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.84	0.44	0.00	0.00	0.54	0.63	0.00	0.00	0.00	0.00	0.70	0.80	0.00	0.86

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	0	31	0	0	0	0	1	0	0	0	0	2	0	0	34
6:15 AM	0	0	0	0	0	0	1	31	0	0	0	1	0	0	0	0	0	0	0	0	33
6:30 AM	0	0	0	0	0	0	0	55	1	0	0	2	1	0	0	0	0	0	1	0	60
6:45 AM	0	0	0	0	0	0	0	63	0	0	0	4	3	0	0	0	0	2	6	0	78
7:00 AM	0	0	0	0	0	0	0	69	2	0	0	0	0	0	0	0	0	1	5	0	77
7:15 AM	0	0	0	0	0	0	1	89	0	0	0	3	4	0	0	0	0	4	10	0	111
7:30 AM	0	0	0	0	0	0	1	118	0	0	0	6	6	0	0	0	0	0	8	0	139
7:45 AM	0	0	0	0	0	0	0	127	1	0	0	2	1	0	0	0	0	2	9	0	142
8:00 AM	0	0	0	0	0	0	1	104	4	0	0	1	4	0	0	0	0	4	7	0	125
8:15 AM	0	0	0	0	0	0	0	86	1	0	0	1	1	0	0	0	0	4	14	0	107
8:30 AM	0	0	0	0	0	0	0	132	1	0	0	3	4	0	0	0	0	1	12	0	153
8:45 AM	0	0	0	0	0	0	1	107	1	0	0	2	4	0	0	0	0	4	12	0	131
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:45 AM	0	0	0	0	1	1	2	0	2	0	0	0
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

24 MORNINGSIDE DR & LEAD AVE Noon
Wednesday, June 5, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	0	0	0	0	2	120	2	0	0	2	5	0	0	0	0	2	8	0	141	548
11:15 AM	0	0	0	0	0	0	0	118	1	0	0	1	4	0	0	0	0	4	1	0	129	560
11:30 AM	0	0	0	0	0	0	1	115	6	0	0	1	4	0	0	0	0	1	5	0	133	577
11:45 AM	0	0	0	0	0	0	3	117	1	0	0	4	3	0	0	0	0	6	11	0	145	601
12:00 PM	0	0	0	0	0	0	2	127	3	0	0	3	5	0	0	0	0	3	10	0	153	635
12:15 PM	0	0	0	0	0	0	1	126	2	0	0	4	2	0	0	0	0	4	7	0	146	637
12:30 PM	0	0	0	0	0	0	3	135	1	0	0	2	5	0	0	0	0	3	8	0	157	651
12:45 PM	0	0	0	0	0	0	2	150	6	0	0	4	3	0	0	0	0	5	9	0	179	647
1:00 PM	0	0	0	0	0	0	0	133	6	0	0	5	3	0	0	0	0	3	5	0	155	623
1:15 PM	0	0	0	0	0	0	1	138	2	0	0	3	3	0	0	0	0	5	8	0	160	0
1:30 PM	0	0	0	0	0	0	0	127	5	0	0	4	4	0	0	0	0	3	10	0	153	0
1:45 PM	0	0	0	0	0	0	0	131	3	0	0	4	4	0	0	0	0	3	10	0	155	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	6	551	15	0	0	14	14	0	0	0	0	15	30	0	645
Mediums	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	6
Total	0	0	0	0	0	0	6	556	15	0	0	14	14	0	0	0	0	16	30	0	651
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.91					0.94					0.76			0.91
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.93	0.79	0.00	0.00	0.80	0.80	0.00	0.00	0.00	0.00	0.67	0.82	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	2	117	2	0	0	2	5	0	0	0	0	2	8	0	138
11:15 AM	0	0	0	0	0	0	0	118	1	0	0	1	4	0	0	0	0	4	1	0	129
11:30 AM	0	0	0	0	0	0	1	113	5	0	0	1	4	0	0	0	0	1	5	0	130
11:45 AM	0	0	0	0	0	0	3	115	1	0	0	4	3	0	0	0	0	6	11	0	143
12:00 PM	0	0	0	0	0	0	2	123	3	0	0	2	5	0	0	0	0	3	10	0	148
12:15 PM	0	0	0	0	0	0	1	126	2	0	0	4	2	0	0	0	0	4	7	0	146
12:30 PM	0	0	0	0	0	0	3	134	1	0	0	2	5	0	0	0	0	3	8	0	156
12:45 PM	0	0	0	0	0	0	2	149	6	0	0	4	3	0	0	0	0	5	9	0	178
1:00 PM	0	0	0	0	0	0	0	133	6	0	0	5	3	0	0	0	0	2	5	0	154
1:15 PM	0	0	0	0	0	0	1	135	2	0	0	3	3	0	0	0	0	5	8	0	157
1:30 PM	0	0	0	0	0	0	0	125	5	0	0	4	4	0	0	0	0	3	10	0	151
1:45 PM	0	0	0	0	0	0	0	131	3	0	0	4	4	0	0	0	0	3	10	0	155
Mediums																					
11:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	1	1	0	0	0	1	2	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	1	1	2
1:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

24 MORNINGSIDE DR & LEAD AVE PM
Wednesday, June 5, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	0	0	0	0	0	1	152	5	0	0	0	5	0	0	0	0	3	11	0	177	788
3:45 PM	0	0	0	0	0	0	1	166	1	0	0	1	4	0	0	0	0	4	9	0	186	867
4:00 PM	0	0	0	0	0	0	0	185	3	0	0	2	3	0	0	0	0	2	8	0	203	932
4:15 PM	0	0	0	0	0	0	0	196	5	0	0	3	8	0	0	0	0	2	8	0	222	962
4:30 PM	0	0	0	0	0	0	4	222	5	0	0	5	2	0	0	0	0	2	16	0	256	978
4:45 PM	0	0	0	0	0	0	2	219	3	0	0	2	3	0	0	0	0	3	19	0	251	942
5:00 PM	0	0	0	0	0	0	2	207	3	0	0	1	2	0	0	0	0	3	15	0	233	883
5:15 PM	0	0	0	0	0	0	3	208	2	0	0	3	3	0	0	0	0	9	10	0	238	819
5:30 PM	0	0	0	0	0	0	1	195	2	0	0	1	3	0	0	0	0	5	13	0	220	718
5:45 PM	0	0	0	0	0	0	2	163	5	0	0	1	4	0	0	0	0	1	16	0	192	0
6:00 PM	0	0	0	0	0	0	0	143	2	0	0	5	2	0	0	0	0	6	11	0	169	0
6:15 PM	0	0	0	0	0	0	2	117	0	0	0	4	0	0	0	0	0	5	9	0	137	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	10	848	12	0	0	10	10	0	0	0	0	17	60	0	967
Mediums	0	0	0	0	0	0	1	8	1	0	0	1	0	0	0	0	0	0	0	0	11
Total	0	0	0	0	0	0	11	856	13	0	0	11	10	0	0	0	0	17	60	0	978
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.95					0.64					0.88			0.96
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.96	0.80	0.00	0.00	0.60	0.63	0.00	0.00	0.00	0.00	0.58	0.79	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	1	151	5	0	0	0	5	0	0	0	0	3	11	0	176
3:45 PM	0	0	0	0	0	0	1	162	1	0	0	1	4	0	0	0	0	4	9	0	182
4:00 PM	0	0	0	0	0	0	0	182	3	0	0	2	3	0	0	0	0	2	8	0	200
4:15 PM	0	0	0	0	0	0	0	196	5	0	0	3	8	0	0	0	0	2	8	0	222
4:30 PM	0	0	0	0	0	0	3	217	4	0	0	5	2	0	0	0	0	2	16	0	249
4:45 PM	0	0	0	0	0	0	2	218	3	0	0	1	3	0	0	0	0	3	19	0	249
5:00 PM	0	0	0	0	0	0	2	206	3	0	0	1	2	0	0	0	0	3	15	0	232
5:15 PM	0	0	0	0	0	0	3	207	2	0	0	3	3	0	0	0	0	9	10	0	237
5:30 PM	0	0	0	0	0	0	1	193	2	0	0	1	3	0	0	0	0	5	13	0	218
5:45 PM	0	0	0	0	0	0	2	162	5	0	0	1	4	0	0	0	0	1	16	0	191
6:00 PM	0	0	0	0	0	0	0	143	2	0	0	5	2	0	0	0	0	6	11	0	169
6:15 PM	0	0	0	0	0	0	2	115	0	0	0	4	0	0	0	0	0	5	9	0	135
Mediums																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	1	1	0	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	1	0	0	0	0	1	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	1	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	1	1	2
6:15 PM	0	0	0	0	1	1	0	1	1	1	0	1

All Traffic Data Services

25 CARLISLE BLVD & LEAD AVE AM
Wednesday, June 5, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	1	31	0	0	0	8	10	0	0	0	0	13	2	0	65	371
6:15 AM	0	0	0	0	0	0	1	30	3	0	0	5	10	0	0	0	0	15	2	0	66	450
6:30 AM	0	0	0	0	0	0	4	56	5	0	0	5	8	0	0	0	0	23	1	0	102	575
6:45 AM	0	0	0	0	0	0	4	68	4	0	0	10	9	0	0	0	0	37	6	0	138	711
7:00 AM	0	0	0	0	0	0	11	67	2	0	0	15	17	0	0	0	0	25	7	0	144	828
7:15 AM	0	0	0	0	0	0	4	97	7	0	0	22	25	0	0	0	0	31	5	0	191	916
7:30 AM	0	0	0	0	0	0	7	123	2	0	0	25	32	0	0	0	0	42	7	0	238	951
7:45 AM	0	0	0	0	0	0	10	135	7	0	0	19	37	0	0	0	0	41	6	0	255	961
8:00 AM	0	0	0	0	0	0	11	105	1	0	0	22	44	0	0	0	0	40	9	0	232	950
8:15 AM	0	0	0	0	0	0	5	105	7	0	0	21	36	0	0	0	0	38	14	0	226	0
8:30 AM	0	0	0	0	0	0	10	133	11	0	0	21	33	0	0	0	0	31	9	0	248	0
8:45 AM	0	0	0	0	0	0	9	120	6	0	0	18	44	0	0	0	0	40	7	0	244	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	36	470	26	0	0	83	146	0	0	0	0	142	38	0	941
Mediums	0	0	0	0	0	0	0	8	0	0	0	0	4	0	0	0	0	8	0	0	20
Total	0	0	0	0	0	0	36	478	26	0	0	83	150	0	0	0	0	150	38	0	961
Bicycles on Road	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.88					0.91					0.95			0.94
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.89	0.59	0.00	0.00	0.88	0.89	0.00	0.00	0.00	0.00	0.96	0.70	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	1	31	0	0	0	8	10	0	0	0	0	13	2	0	65
6:15 AM	0	0	0	0	0	0	1	30	3	0	0	5	10	0	0	0	0	15	2	0	66
6:30 AM	0	0	0	0	0	0	4	53	5	0	0	5	7	0	0	0	0	23	1	0	98
6:45 AM	0	0	0	0	0	0	4	68	4	0	0	10	9	0	0	0	0	36	6	0	137
7:00 AM	0	0	0	0	0	0	11	66	2	0	0	15	17	0	0	0	0	25	7	0	143
7:15 AM	0	0	0	0	0	0	4	96	7	0	0	22	21	0	0	0	0	30	5	0	185
7:30 AM	0	0	0	0	0	0	7	121	2	0	0	25	32	0	0	0	0	40	7	0	234
7:45 AM	0	0	0	0	0	0	10	134	7	0	0	19	37	0	0	0	0	39	6	0	252
8:00 AM	0	0	0	0	0	0	11	102	1	0	0	22	42	0	0	0	0	36	9	0	223
8:15 AM	0	0	0	0	0	0	5	104	7	0	0	21	34	0	0	0	0	38	14	0	223
8:30 AM	0	0	0	0	0	0	10	130	11	0	0	21	33	0	0	0	0	29	9	0	243
8:45 AM	0	0	0	0	0	0	8	120	6	0	0	18	43	0	0	0	0	38	7	0	240
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	4
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	3
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	4	0	0	9
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	5
8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	4
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	1	1	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	1	1	2	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	2

All Traffic Data Services

25 CARLISLE BLVD & LEAD AVE Noon
Wednesday, June 5, 2024

Peak Hour
11:45 AM - 12:45 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	7	122	9	0	0	19	48	0	0	0	0	34	8	0	247	991
11:15 AM	0	0	0	0	0	0	6	113	7	0	0	20	55	0	0	0	0	34	12	0	247	1,029
11:30 AM	0	0	0	0	0	0	7	116	8	0	0	24	52	0	0	0	0	19	7	0	233	1,036
11:45 AM	0	0	0	0	0	0	13	147	9	0	0	10	44	0	0	0	0	33	8	0	264	1,068
12:00 PM	0	0	0	0	0	0	15	139	13	0	0	18	45	0	0	0	0	39	16	0	285	1,056
12:15 PM	0	0	0	0	0	0	10	123	4	0	0	22	47	0	0	0	0	35	13	0	254	1,029
12:30 PM	0	0	0	0	0	0	13	131	8	0	0	15	40	0	0	0	0	45	13	0	265	1,041
12:45 PM	0	0	0	0	0	0	13	129	15	0	0	10	41	0	0	0	0	31	13	0	252	1,032
1:00 PM	0	0	0	0	0	0	14	126	8	0	0	18	40	0	0	0	0	35	17	0	258	1,026
1:15 PM	0	0	0	0	0	0	13	125	9	0	0	21	49	0	0	0	0	41	8	0	266	0
1:30 PM	0	0	0	0	0	0	18	117	10	0	0	16	32	0	0	0	0	52	11	0	256	0
1:45 PM	0	0	0	0	0	0	13	116	5	0	0	16	44	0	0	0	0	38	14	0	246	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	50	535	33	0	0	65	173	0	0	0	0	149	50	0	1,055
Mediums	0	0	0	0	0	0	1	5	1	0	0	0	3	0	0	0	0	3	0	0	13
Total	0	0	0	0	0	0	51	540	34	0	0	65	176	0	0	0	0	152	50	0	1,068
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.92					0.89					0.86			0.94
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.92	0.70	0.00	0.00	0.77	0.90	0.00	0.00	0.00	0.00	0.80	0.82	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	7	119	9	0	0	18	43	0	0	0	0	34	8	0	238
11:15 AM	0	0	0	0	0	0	6	113	7	0	0	20	52	0	0	0	0	33	11	0	242
11:30 AM	0	0	0	0	0	0	6	115	8	0	0	24	49	0	0	0	0	17	6	0	225
11:45 AM	0	0	0	0	0	0	13	145	8	0	0	10	44	0	0	0	0	32	8	0	260
12:00 PM	0	0	0	0	0	0	14	137	13	0	0	18	44	0	0	0	0	39	16	0	281
12:15 PM	0	0	0	0	0	0	10	123	4	0	0	22	45	0	0	0	0	33	13	0	250
12:30 PM	0	0	0	0	0	0	13	130	8	0	0	15	40	0	0	0	0	45	13	0	264
12:45 PM	0	0	0	0	0	0	13	129	14	0	0	10	40	0	0	0	0	30	13	0	249
1:00 PM	0	0	0	0	0	0	14	125	8	0	0	18	39	0	0	0	0	33	17	0	254
1:15 PM	0	0	0	0	0	0	13	123	9	0	0	21	48	0	0	0	0	41	8	0	263
1:30 PM	0	0	0	0	0	0	18	115	9	0	0	16	31	0	0	0	0	51	11	0	251
1:45 PM	0	0	0	0	0	0	13	116	5	0	0	16	43	0	0	0	0	36	14	0	243
Mediums																					
11:00 AM	0	0	0	0	0	0	0	3	0	0	0	1	5	0	0	0	0	0	0	0	9
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	1	0	5
11:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	3	0	0	0	0	2	1	0	8
11:45 AM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	4
12:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	4
1:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	1	0	0	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	1	2	0	0	0	0	0	0	1	1	2
11:45 AM	0	0	0	0	0	0	1	1	2	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	1	1	0	0	0	0	0	0	0	2	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

25 CARLISLE BLVD & LEAD AVE PM
Wednesday, June 5, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	16	145	11	0	0	24	57	0	0	0	0	45	10	0	308	1,427
3:45 PM	0	0	0	0	0	0	11	165	16	0	0	40	53	0	0	0	0	45	12	0	342	1,539
4:00 PM	0	0	0	0	0	0	14	179	8	0	0	37	70	0	0	0	0	47	14	0	369	1,618
4:15 PM	0	0	0	0	0	0	11	199	6	0	0	44	83	0	0	0	0	47	18	0	408	1,624
4:30 PM	0	0	0	0	0	0	15	203	17	0	0	53	74	0	0	0	0	45	13	0	420	1,597
4:45 PM	0	0	0	0	0	0	11	219	12	0	0	38	79	0	0	0	0	47	15	0	421	1,502
5:00 PM	0	0	0	0	0	0	16	199	5	0	0	33	68	0	0	0	0	40	14	0	375	1,420
5:15 PM	0	0	0	0	0	0	15	203	10	0	0	32	57	0	0	0	0	53	11	0	381	1,330
5:30 PM	0	0	0	0	0	0	16	182	8	0	0	30	41	0	0	0	0	38	10	0	325	1,204
5:45 PM	0	0	0	0	0	0	17	163	12	0	0	24	53	0	0	0	0	56	14	0	339	0
6:00 PM	0	0	0	0	0	0	11	144	10	0	0	22	38	0	0	0	0	47	13	0	285	0
6:15 PM	0	0	0	0	0	0	10	113	10	0	0	23	41	0	0	0	0	45	13	0	255	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	53	811	40	0	0	166	299	0	0	0	0	172	59	0	1,600
Mediums	0	0	0	0	0	0	0	9	0	0	0	2	5	0	0	0	0	7	1	0	24
Total	0	0	0	0	0	0	53	820	40	0	0	168	304	0	0	0	0	179	60	0	1,624
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.96					0.94					0.95			0.96
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.94	0.69	0.00	0.00	0.82	0.92	0.00	0.00	0.00	0.00	0.87	0.83	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	16	144	11	0	0	24	57	0	0	0	0	44	10	0	306
3:45 PM	0	0	0	0	0	0	11	161	16	0	0	40	52	0	0	0	0	45	12	0	337
4:00 PM	0	0	0	0	0	0	14	176	8	0	0	35	68	0	0	0	0	46	13	0	360
4:15 PM	0	0	0	0	0	0	11	199	6	0	0	44	82	0	0	0	0	43	17	0	402
4:30 PM	0	0	0	0	0	0	15	199	17	0	0	53	72	0	0	0	0	45	13	0	414
4:45 PM	0	0	0	0	0	0	11	216	12	0	0	37	78	0	0	0	0	47	15	0	416
5:00 PM	0	0	0	0	0	0	16	197	5	0	0	32	67	0	0	0	0	37	14	0	368
5:15 PM	0	0	0	0	0	0	15	203	10	0	0	32	57	0	0	0	0	53	11	0	381
5:30 PM	0	0	0	0	0	0	16	180	8	0	0	30	40	0	0	0	0	37	10	0	321
5:45 PM	0	0	0	0	0	0	17	162	12	0	0	24	52	0	0	0	0	56	14	0	337
6:00 PM	0	0	0	0	0	0	11	144	10	0	0	22	36	0	0	0	0	46	13	0	282
6:15 PM	0	0	0	0	0	0	10	111	10	0	0	23	41	0	0	0	0	45	12	0	252
Mediums																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	2	2	0	0	0	0	1	1	0	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	1	0	6
4:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	6
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	3	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	4
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	0	0	0	0	1	1	0	0	0
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

26 CARLISLE BLVD & COAL AVE AM
Wednesday, June 5, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	1	24	3	0	0	0	0	0	0	0	0	20	2	0	0	0	14	0	0	64	359
6:15 AM	0	2	31	5	0	0	0	0	0	0	0	0	13	2	0	0	0	16	0	0	69	446
6:30 AM	0	1	41	8	0	0	0	0	0	0	0	0	11	3	0	0	0	26	0	0	90	561
6:45 AM	0	2	60	10	0	0	0	0	0	0	0	0	17	7	0	0	2	38	0	0	136	700
7:00 AM	0	3	59	20	0	0	0	0	0	0	0	0	27	7	0	0	2	33	0	0	151	804
7:15 AM	0	4	80	12	0	0	0	0	0	0	0	0	45	6	0	0	1	36	0	0	184	877
7:30 AM	0	7	101	15	0	0	0	0	0	0	0	0	50	9	0	0	2	45	0	0	229	891
7:45 AM	0	5	91	25	0	0	0	0	0	0	0	0	51	14	0	0	6	48	0	0	240	872
8:00 AM	0	17	81	17	0	0	0	0	0	0	0	0	53	6	0	0	3	47	0	0	224	861
8:15 AM	0	8	79	14	0	0	0	0	0	0	0	0	47	9	0	0	2	39	0	0	198	0
8:30 AM	0	9	88	13	0	0	0	0	0	0	0	0	45	10	0	0	5	40	0	0	210	0
8:45 AM	0	10	98	11	0	0	0	0	0	0	0	0	52	8	0	0	5	45	0	0	229	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	36	350	70	0	0	0	0	0	0	0	0	198	37	0	0	12	172	0	0	875
Mediums	0	1	2	1	0	0	0	0	0	0	0	0	3	1	0	0	1	7	0	0	16
Total	0	37	352	71	0	0	0	0	0	0	0	0	201	38	0	0	13	179	0	0	891
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.93					0.00					0.92					0.89			0.93
Peak Hour Factor (PHF)	0.00	0.65	0.87	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.70	0.00	0.00	0.67	0.93	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	23	3	0	0	0	0	0	0	0	0	20	2	0	0	0	14	0	0	63
6:15 AM	0	2	29	5	0	0	0	0	0	0	0	0	13	2	0	0	0	16	0	0	67
6:30 AM	0	1	40	8	0	0	0	0	0	0	0	0	10	3	0	0	0	26	0	0	88
6:45 AM	0	2	58	10	0	0	0	0	0	0	0	0	17	7	0	0	2	37	0	0	133
7:00 AM	0	3	59	20	0	0	0	0	0	0	0	0	27	7	0	0	2	33	0	0	151
7:15 AM	0	4	79	12	0	0	0	0	0	0	0	0	41	5	0	0	1	35	0	0	177
7:30 AM	0	7	101	15	0	0	0	0	0	0	0	0	50	9	0	0	2	43	0	0	227
7:45 AM	0	5	90	25	0	0	0	0	0	0	0	0	51	14	0	0	5	47	0	0	237
8:00 AM	0	17	81	17	0	0	0	0	0	0	0	0	51	6	0	0	3	44	0	0	219
8:15 AM	0	7	78	13	0	0	0	0	0	0	0	0	46	8	0	0	2	38	0	0	192
8:30 AM	0	9	86	13	0	0	0	0	0	0	0	0	45	8	0	0	5	38	0	0	204
8:45 AM	0	10	97	11	0	0	0	0	0	0	0	0	51	8	0	0	5	42	0	0	224
Mediums																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	5
8:15 AM	0	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	6
8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	6
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	5
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	1	1	2	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	1	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

26 CARLISLE BLVD & COAL AVE Noon
Wednesday, June 5, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	12	90	10	0	0	0	0	0	0	0	0	51	10	0	0	5	30	0	0	208	973
11:15 AM	0	14	116	18	0	0	0	0	0	0	0	0	60	16	0	0	3	36	0	0	263	1,026
11:30 AM	0	16	131	11	0	0	0	0	0	0	0	0	59	7	0	0	4	25	0	0	253	1,035
11:45 AM	0	9	111	21	0	0	0	0	0	0	0	0	45	18	0	0	5	40	0	0	249	1,060
12:00 PM	0	11	121	8	0	0	0	0	0	0	0	0	51	14	0	0	8	48	0	0	261	1,087
12:15 PM	0	9	130	23	0	0	0	0	0	0	0	0	60	7	0	0	7	36	0	0	272	1,069
12:30 PM	0	11	130	23	0	0	0	0	0	0	0	0	44	16	0	0	4	50	0	0	278	1,059
12:45 PM	0	13	149	20	0	0	0	0	0	0	0	0	37	9	0	0	6	42	0	0	276	1,040
1:00 PM	0	15	106	18	0	0	0	0	0	0	0	0	40	14	0	0	4	46	0	0	243	1,006
1:15 PM	0	21	110	20	0	0	0	0	0	0	0	0	50	9	0	0	7	45	0	0	262	0
1:30 PM	0	9	101	27	0	0	0	0	0	0	0	0	40	12	0	0	7	63	0	0	259	0
1:45 PM	0	12	108	19	0	0	0	0	0	0	0	0	46	9	0	0	4	44	0	0	242	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	43	527	74	0	0	0	0	0	0	0	0	189	46	0	0	25	172	0	0	1,076
Mediums	0	1	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	11
Total	0	44	530	74	0	0	0	0	0	0	0	0	192	46	0	0	25	176	0	0	1,087
Bicycles on Road	0	2	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.89					0.00					0.89					0.79			0.98
Peak Hour Factor (PHF)	0.00	0.71	0.89	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.76	0.00	0.00	0.78	0.79	0.00	0.00	0.98

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	11	90	10	0	0	0	0	0	0	0	0	46	9	0	0	5	30	0	0	201
11:15 AM	0	14	114	18	0	0	0	0	0	0	0	0	57	15	0	0	3	35	0	0	256
11:30 AM	0	16	129	11	0	0	0	0	0	0	0	0	56	7	0	0	4	22	0	0	245
11:45 AM	0	9	111	21	0	0	0	0	0	0	0	0	45	18	0	0	5	39	0	0	248
12:00 PM	0	11	121	8	0	0	0	0	0	0	0	0	50	14	0	0	8	47	0	0	259
12:15 PM	0	8	127	23	0	0	0	0	0	0	0	0	59	7	0	0	7	34	0	0	265
12:30 PM	0	11	130	23	0	0	0	0	0	0	0	0	44	16	0	0	4	50	0	0	278
12:45 PM	0	13	149	20	0	0	0	0	0	0	0	0	36	9	0	0	6	41	0	0	274
1:00 PM	0	14	105	18	0	0	0	0	0	0	0	0	40	14	0	0	3	45	0	0	239
1:15 PM	0	20	109	20	0	0	0	0	0	0	0	0	50	9	0	0	7	45	0	0	260
1:30 PM	0	9	100	26	0	0	0	0	0	0	0	0	39	11	0	0	6	63	0	0	254
1:45 PM	0	12	107	19	0	0	0	0	0	0	0	0	45	9	0	0	4	42	0	0	238
Mediums																					
11:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	7
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	0	7
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	8
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:15 PM	0	1	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	7
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
1:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4
1:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	5
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	1	1	0	0	0	0	1	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	1	0	1	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	1	1	0	0	0	1	0	1	0	2	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

26 CARLISLE BLVD & COAL AVE PM
Wednesday, June 5, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	14	139	21	0	0	0	0	0	0	0	0	65	15	0	0	5	56	0	0	315	1,395
3:45 PM	0	16	150	22	0	0	0	0	0	0	0	0	83	19	0	0	3	54	0	0	347	1,449
4:00 PM	0	13	131	19	0	0	0	0	0	0	0	0	95	23	0	0	5	56	0	0	342	1,485
4:15 PM	0	20	153	37	0	0	0	0	0	0	0	0	109	17	0	0	3	52	0	0	391	1,549
4:30 PM	0	19	136	28	0	0	0	0	0	0	0	0	109	17	0	0	6	54	0	0	369	1,548
4:45 PM	0	20	156	33	0	0	0	0	0	0	0	0	96	21	0	0	5	52	0	0	383	1,478
5:00 PM	0	22	188	37	0	0	0	0	0	0	0	0	78	25	0	0	6	50	0	0	406	1,387
5:15 PM	0	15	189	29	0	0	0	0	0	0	0	0	74	15	0	0	5	63	0	0	390	1,256
5:30 PM	0	9	123	39	0	0	0	0	0	0	0	0	63	12	0	0	2	51	0	0	299	1,133
5:45 PM	0	13	106	26	0	0	0	0	0	0	0	0	64	14	0	0	3	66	0	0	292	0
6:00 PM	0	14	114	23	0	0	0	0	0	0	0	0	48	13	0	0	5	58	0	0	275	0
6:15 PM	0	10	111	27	0	0	0	0	0	0	0	0	54	13	0	0	3	49	0	0	267	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	80	630	135	0	0	0	0	0	0	0	0	387	79	0	0	20	203	0	0	1,534
Mediums	0	1	3	0	0	0	0	0	0	0	0	0	5	1	0	0	0	5	0	0	15
Total	0	81	633	135	0	0	0	0	0	0	0	0	392	80	0	0	20	208	0	0	1,549
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.88					0.00					0.97					0.92			0.95
Peak Hour Factor (PHF)	0.00	0.92	0.88	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.80	0.00	0.00	0.92	0.90	0.00	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	14	139	21	0	0	0	0	0	0	0	0	64	15	0	0	5	55	0	0	313
3:45 PM	0	16	149	22	0	0	0	0	0	0	0	0	82	19	0	0	3	54	0	0	345
4:00 PM	0	12	130	19	0	0	0	0	0	0	0	0	92	23	0	0	5	54	0	0	335
4:15 PM	0	20	151	37	0	0	0	0	0	0	0	0	108	17	0	0	3	50	0	0	386
4:30 PM	0	19	136	28	0	0	0	0	0	0	0	0	108	17	0	0	6	53	0	0	367
4:45 PM	0	19	155	33	0	0	0	0	0	0	0	0	95	20	0	0	5	52	0	0	379
5:00 PM	0	22	188	37	0	0	0	0	0	0	0	0	76	25	0	0	6	48	0	0	402
5:15 PM	0	15	188	29	0	0	0	0	0	0	0	0	74	15	0	0	5	62	0	0	388
5:30 PM	0	9	121	39	0	0	0	0	0	0	0	0	62	12	0	0	2	50	0	0	295
5:45 PM	0	13	106	26	0	0	0	0	0	0	0	0	63	14	0	0	3	66	0	0	291
6:00 PM	0	13	114	23	0	0	0	0	0	0	0	0	47	13	0	0	5	57	0	0	272
6:15 PM	0	10	109	27	0	0	0	0	0	0	0	0	54	13	0	0	3	49	0	0	265
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	7
4:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	1	0	1	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

27 MORNINGSIDE DR & COAL AVE AM
Wednesday, June 5, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	26	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	29	185
6:15 AM	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	37	223
6:30 AM	0	2	45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	48	280
6:45 AM	0	2	65	1	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	71	361
7:00 AM	0	0	65	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	67	407
7:15 AM	0	2	86	0	0	0	0	0	0	0	0	0	3	1	0	0	1	1	0	0	94	437
7:30 AM	0	4	115	0	0	0	0	0	0	0	0	0	5	1	0	0	3	1	0	0	129	437
7:45 AM	0	1	111	0	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	117	415
8:00 AM	0	2	88	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	97	418
8:15 AM	0	2	86	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	94	0
8:30 AM	0	1	98	0	0	0	0	0	0	0	0	0	4	2	0	0	0	2	0	0	107	0
8:45 AM	0	2	106	1	0	0	0	0	0	0	0	0	5	1	0	0	1	4	0	0	120	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	9	392	0	0	0	0	0	0	0	0	0	12	5	0	0	4	6	0	0	428
Mediums	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	9
Total	0	9	400	0	0	0	0	0	0	0	0	0	12	5	0	0	4	7	0	0	437
Bicycles on Road	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	8
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.86					0.00					0.71					0.75			0.85
Peak Hour Factor (PHF)	0.00	0.56	0.87	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.58	0.00	0.00	0.42	0.81	0.00	0.00	0.85

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	25	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	28
6:15 AM	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	34
6:30 AM	0	2	44	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	47
6:45 AM	0	2	64	1	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	70
7:00 AM	0	0	65	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	67
7:15 AM	0	2	83	0	0	0	0	0	0	0	0	0	3	1	0	0	1	1	0	0	91
7:30 AM	0	4	114	0	0	0	0	0	0	0	0	0	5	1	0	0	3	1	0	0	128
7:45 AM	0	1	108	0	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	114
8:00 AM	0	2	87	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	95
8:15 AM	0	2	84	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	92
8:30 AM	0	1	94	0	0	0	0	0	0	0	0	0	4	2	0	0	0	2	0	0	103
8:45 AM	0	1	105	1	0	0	0	0	0	0	0	0	5	1	0	0	1	4	0	0	118
Mediums																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	2	2	0	1	1	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

27 MORNINGSIDE DR & COAL AVE Noon
Wednesday, June 5, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	3	101	0	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	113	553
11:15 AM	0	2	137	1	0	0	0	0	0	0	0	0	1	4	0	0	2	3	0	0	150	591
11:30 AM	0	4	136	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	143	593
11:45 AM	0	3	132	2	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	147	620
12:00 PM	0	3	136	3	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	151	649
12:15 PM	0	3	136	1	0	0	0	0	0	0	0	0	4	4	0	0	2	2	0	0	152	632
12:30 PM	0	4	154	0	0	0	0	0	0	0	0	0	6	2	0	0	0	4	0	0	170	622
12:45 PM	0	3	157	4	0	0	0	0	0	0	0	0	3	1	0	0	2	6	0	0	176	577
1:00 PM	0	2	119	3	0	0	0	0	0	0	0	0	5	1	0	0	1	3	0	0	134	525
1:15 PM	0	0	131	0	0	0	0	0	0	0	0	0	4	2	0	0	0	5	0	0	142	0
1:30 PM	0	3	113	2	0	0	0	0	0	0	0	0	4	0	0	0	2	1	0	0	125	0
1:45 PM	0	2	114	0	0	0	0	0	0	0	0	0	5	0	0	0	1	2	0	0	124	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	13	579	8	0	0	0	0	0	0	0	0	17	8	0	0	5	15	0	0	645
Mediums	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	13	583	8	0	0	0	0	0	0	0	0	17	8	0	0	5	15	0	0	649
Bicycles on Road	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.92					0.00					0.81					0.66			0.92
Peak Hour Factor (PHF)	0.00	0.81	0.93	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.50	0.00	0.00	0.63	0.75	0.00	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	3	100	0	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	112
11:15 AM	0	2	134	1	0	0	0	0	0	0	0	0	1	4	0	0	2	3	0	0	147
11:30 AM	0	4	135	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	142
11:45 AM	0	2	131	2	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	145
12:00 PM	0	3	135	3	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	150
12:15 PM	0	3	133	1	0	0	0	0	0	0	0	0	4	4	0	0	2	2	0	0	149
12:30 PM	0	4	154	0	0	0	0	0	0	0	0	0	6	2	0	0	0	4	0	0	170
12:45 PM	0	3	157	4	0	0	0	0	0	0	0	0	3	1	0	0	2	6	0	0	176
1:00 PM	0	2	118	3	0	0	0	0	0	0	0	0	5	1	0	0	1	2	0	0	132
1:15 PM	0	0	131	0	0	0	0	0	0	0	0	0	4	2	0	0	0	5	0	0	142
1:30 PM	0	3	110	2	0	0	0	0	0	0	0	0	4	0	0	0	2	1	0	0	122
1:45 PM	0	2	113	0	0	0	0	0	0	0	0	0	5	0	0	0	1	2	0	0	123
Mediums																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
11:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	2	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

27 MORNINGSIDE DR & COAL AVE PM
Wednesday, June 5, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	1	153	2	0	0	0	0	0	0	0	0	2	3	0	0	2	0	0	0	163	680
3:45 PM	0	1	173	1	0	0	0	0	0	0	0	0	3	1	0	0	4	1	0	0	184	680
4:00 PM	0	3	153	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	161	688
4:15 PM	0	6	162	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	172	747
4:30 PM	0	2	153	2	0	0	0	0	0	0	0	0	2	2	0	0	0	2	0	0	163	805
4:45 PM	0	5	179	0	0	0	0	0	0	0	0	0	0	3	0	0	2	3	0	0	192	785
5:00 PM	0	3	206	4	0	0	0	0	0	0	0	0	2	2	0	0	2	1	0	0	220	723
5:15 PM	0	3	209	2	0	0	0	0	0	0	0	0	3	2	0	0	7	4	0	0	230	631
5:30 PM	0	4	128	1	0	0	0	0	0	0	0	0	1	4	0	0	1	4	0	0	143	541
5:45 PM	0	2	123	1	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	130	0
6:00 PM	0	3	114	1	0	0	0	0	0	0	0	0	4	1	0	0	1	4	0	0	128	0
6:15 PM	0	1	130	2	0	0	0	0	0	0	0	0	2	0	0	0	1	4	0	0	140	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	12	744	8	0	0	0	0	0	0	0	0	7	8	0	0	11	9	0	0	799
Mediums	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	6
Total	0	13	747	8	0	0	0	0	0	0	0	0	7	9	0	0	11	10	0	0	805
Bicycles on Road	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	6
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.90					0.00					0.90					0.55			0.88
Peak Hour Factor (PHF)	0.00	0.67	0.89	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.69	0.00	0.00	0.43	0.75	0.00	0.00	0.88

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	1	153	2	0	0	0	0	0	0	0	0	2	3	0	0	2	0	0	0	163
3:45 PM	0	1	171	1	0	0	0	0	0	0	0	0	3	1	0	0	4	1	0	0	182
4:00 PM	0	3	152	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	160
4:15 PM	0	6	159	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	169
4:30 PM	0	2	152	2	0	0	0	0	0	0	0	0	2	2	0	0	0	1	0	0	161
4:45 PM	0	4	178	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3	0	0	189
5:00 PM	0	3	206	4	0	0	0	0	0	0	0	0	2	2	0	0	2	1	0	0	220
5:15 PM	0	3	208	2	0	0	0	0	0	0	0	0	3	2	0	0	7	4	0	0	229
5:30 PM	0	4	127	1	0	0	0	0	0	0	0	0	1	4	0	0	1	4	0	0	142
5:45 PM	0	2	122	1	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	129
6:00 PM	0	3	114	1	0	0	0	0	0	0	0	0	4	1	0	0	1	4	0	0	128
6:15 PM	0	1	128	2	0	0	0	0	0	0	0	0	2	0	0	0	1	4	0	0	138
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

28 WELLESLEY DR & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	0	29	2	0	0	0	0	0	0	0	0	0	0	0	31	247
6:15 AM	0	0	0	0	0	0	0	45	2	0	0	0	1	0	0	0	0	0	2	0	50	319
6:30 AM	0	0	0	0	0	0	0	74	1	0	0	1	2	0	0	0	0	1	1	0	80	404
6:45 AM	0	0	0	0	0	0	0	79	2	0	0	2	2	0	0	0	0	0	1	0	86	521
7:00 AM	0	0	0	0	0	0	2	96	1	0	0	2	1	0	0	0	0	1	0	0	103	617
7:15 AM	0	0	0	0	0	0	3	108	3	0	0	10	7	0	0	0	0	1	3	0	135	668
7:30 AM	0	0	0	0	0	0	0	166	2	0	0	12	7	0	0	0	0	6	4	0	197	710
7:45 AM	0	0	0	0	0	0	3	169	3	0	0	2	2	0	0	0	0	2	1	0	182	688
8:00 AM	0	0	0	0	0	0	2	141	1	0	0	4	2	0	0	0	0	0	4	0	154	679
8:15 AM	0	0	0	0	0	0	1	159	1	0	0	4	5	0	0	0	0	3	4	0	177	0
8:30 AM	0	0	0	0	0	0	1	160	0	0	0	9	4	0	0	0	0	0	1	0	175	0
8:45 AM	0	0	0	0	0	0	2	142	4	0	0	16	6	0	0	0	0	2	1	0	173	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	6	630	7	0	0	22	16	0	0	0	0	10	13	0	704
Mediums	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	6
Total	0	0	0	0	0	0	6	635	7	0	0	22	16	0	0	0	0	11	13	0	710
Bicycles on Road	0	0	0	0	0	0	0	6	1	0	0	0	3	0	0	0	0	1	0	0	11
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.57					0.60			0.90
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.94	0.75	0.00	0.00	0.52	0.64	0.00	0.00	0.00	0.00	0.46	0.81	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	0	29	2	0	0	0	0	0	0	0	0	0	0	0	31
6:15 AM	0	0	0	0	0	0	0	45	2	0	0	0	1	0	0	0	0	0	2	0	50
6:30 AM	0	0	0	0	0	0	0	72	1	0	0	1	2	0	0	0	0	1	1	0	78
6:45 AM	0	0	0	0	0	0	0	78	2	0	0	2	2	0	0	0	0	0	1	0	85
7:00 AM	0	0	0	0	0	0	2	95	1	0	0	2	1	0	0	0	0	1	0	0	102
7:15 AM	0	0	0	0	0	0	3	107	3	0	0	9	7	0	0	0	0	1	3	0	133
7:30 AM	0	0	0	0	0	0	0	162	2	0	0	12	7	0	0	0	0	6	4	0	193
7:45 AM	0	0	0	0	0	0	3	169	3	0	0	2	2	0	0	0	0	2	1	0	182
8:00 AM	0	0	0	0	0	0	2	141	1	0	0	4	2	0	0	0	0	0	4	0	154
8:15 AM	0	0	0	0	0	0	1	158	1	0	0	4	5	0	0	0	0	2	4	0	175
8:30 AM	0	0	0	0	0	0	1	157	0	0	0	9	4	0	0	0	0	0	1	0	172
8:45 AM	0	0	0	0	0	0	2	142	4	0	0	16	6	0	0	0	0	2	1	0	173
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	3	1	0	0	0	1	0	0	0	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	1	1	0	0	0	0	1	1
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	1	0	1	3	0	3	1	0	1
7:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:30 AM	0	0	0	1	3	4	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	2	2	4	0	0	0	2	2	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	0	1	1	0	1

All Traffic Data Services

28 WELLESLEY DR & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	0	139	3	0	0	1	3	1	0	0	0	5	6	0	158	610
11:15 AM	0	0	0	0	0	0	1	123	1	0	0	0	0	0	0	0	0	4	2	0	131	637
11:30 AM	0	0	0	0	0	0	1	147	1	0	0	1	1	0	0	0	0	2	5	0	158	673
11:45 AM	0	0	0	0	0	0	3	145	3	0	0	5	2	0	0	0	0	2	3	0	163	666
12:00 PM	0	0	0	0	0	0	4	155	4	0	0	6	2	0	0	0	0	2	12	0	185	716
12:15 PM	0	0	0	0	0	0	0	155	5	0	0	1	3	0	0	0	0	2	1	0	167	696
12:30 PM	0	0	0	0	0	0	2	133	3	0	0	3	2	0	0	0	0	3	5	0	151	691
12:45 PM	0	0	0	0	0	0	2	187	4	0	0	6	2	0	0	0	0	3	9	0	213	707
1:00 PM	0	0	0	0	0	0	2	154	2	0	0	0	1	0	0	0	0	1	5	0	165	658
1:15 PM	0	0	0	0	0	0	1	145	0	0	0	1	4	0	0	0	0	5	6	0	162	0
1:30 PM	0	0	0	0	0	0	1	155	2	0	0	4	0	0	0	0	0	1	4	0	167	0
1:45 PM	0	0	0	0	0	0	1	141	4	0	0	4	2	0	0	0	0	8	4	0	164	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	0	0	0	0	8	618	16	0	0	16	9	0	0	0	0	9	26	0	702
Mediums	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	1	1	0	13
Total	0	0	0	0	0	0	8	630	16	0	0	16	9	0	0	0	0	10	27	0	716
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.85					0.78					0.66			0.84
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.86	0.80	0.00	0.00	0.67	0.56	0.25	0.00	0.00	0.00	0.47	0.56	0.00	0.84

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	0	135	3	0	0	1	2	1	0	0	0	5	6	0	153
11:15 AM	0	0	0	0	0	0	1	118	1	0	0	0	0	0	0	0	0	4	2	0	126
11:30 AM	0	0	0	0	0	0	1	145	1	0	0	1	1	0	0	0	0	2	5	0	156
11:45 AM	0	0	0	0	0	0	3	140	2	0	0	4	2	0	0	0	0	2	3	0	156
12:00 PM	0	0	0	0	0	0	4	152	4	0	0	6	2	0	0	0	0	2	12	0	182
12:15 PM	0	0	0	0	0	0	0	151	5	0	0	1	3	0	0	0	0	2	1	0	163
12:30 PM	0	0	0	0	0	0	2	130	3	0	0	3	2	0	0	0	0	3	5	0	148
12:45 PM	0	0	0	0	0	0	2	185	4	0	0	6	2	0	0	0	0	2	8	0	209
1:00 PM	0	0	0	0	0	0	2	154	2	0	0	0	1	0	0	0	0	1	5	0	165
1:15 PM	0	0	0	0	0	0	1	143	0	0	0	1	4	0	0	0	0	5	6	0	160
1:30 PM	0	0	0	0	0	0	1	152	2	0	0	4	0	0	0	0	0	1	4	0	164
1:45 PM	0	0	0	0	0	0	1	140	4	0	0	3	2	0	0	0	0	8	4	0	162
Mediums																					
11:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	5
11:15 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
11:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	5	1	0	0	1	0	0	0	0	0	0	0	0	7
12:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	4
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	2	2	0	0	0	0	3	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	1	0	1	1	0	0	0
12:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

28 WELLESLEY DR & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WELLESLEY DR					WELLESLEY DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	1	167	3	0	0	5	2	0	0	0	0	6	7	0	191	907
3:45 PM	0	0	0	0	0	0	3	215	1	0	0	6	7	0	0	0	0	1	2	0	235	922
4:00 PM	0	0	0	0	0	0	5	220	4	0	0	9	4	0	0	0	0	3	4	0	249	911
4:15 PM	0	0	0	0	0	0	5	211	4	0	0	3	5	0	0	0	0	2	2	0	232	929
4:30 PM	0	0	0	0	0	0	2	187	3	0	0	3	2	0	0	0	0	1	8	0	206	962
4:45 PM	0	0	0	0	0	0	1	209	0	0	0	3	6	0	0	0	0	1	4	0	224	976
5:00 PM	0	0	0	0	0	0	2	242	3	0	0	4	5	0	0	0	0	1	10	0	267	999
5:15 PM	0	0	0	0	0	0	5	239	5	0	0	3	4	0	0	0	0	4	5	0	265	940
5:30 PM	0	0	0	0	0	0	1	196	3	0	0	6	4	0	0	0	0	1	9	0	220	864
5:45 PM	0	0	0	0	0	0	5	221	3	0	0	2	4	0	0	0	0	2	10	0	247	0
6:00 PM	0	0	0	0	0	0	4	191	2	0	0	2	3	0	0	0	0	3	3	0	208	0
6:15 PM	0	0	0	0	0	0	4	162	2	0	0	1	3	0	0	0	0	6	11	0	189	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	13	891	14	0	0	15	17	0	0	0	0	8	34	0	992
Mediums	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	0	0	0	0	0	0	13	898	14	0	0	15	17	0	0	0	0	8	34	0	999
Bicycles on Road	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.79					0.66			0.94
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.93	0.70	0.00	0.00	0.64	0.79	0.00	0.00	0.00	0.00	0.50	0.85	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	1	163	3	0	0	5	1	0	0	0	0	6	7	0	186
3:45 PM	0	0	0	0	0	0	3	211	1	0	0	6	7	0	0	0	0	1	1	0	230
4:00 PM	0	0	0	0	0	0	5	217	4	0	0	9	4	0	0	0	0	3	4	0	246
4:15 PM	0	0	0	0	0	0	5	206	4	0	0	3	5	0	0	0	0	2	2	0	227
4:30 PM	0	0	0	0	0	0	2	185	3	0	0	3	2	0	0	0	0	1	8	0	204
4:45 PM	0	0	0	0	0	0	1	206	0	0	0	3	6	0	0	0	0	1	4	0	221
5:00 PM	0	0	0	0	0	0	2	240	3	0	0	4	5	0	0	0	0	1	10	0	265
5:15 PM	0	0	0	0	0	0	5	236	5	0	0	3	4	0	0	0	0	4	5	0	262
5:30 PM	0	0	0	0	0	0	1	194	3	0	0	6	4	0	0	0	0	1	9	0	218
5:45 PM	0	0	0	0	0	0	5	221	3	0	0	2	4	0	0	0	0	2	10	0	247
6:00 PM	0	0	0	0	0	0	4	189	2	0	0	2	3	0	0	0	0	3	3	0	206
6:15 PM	0	0	0	0	0	0	4	160	2	0	0	1	3	0	0	0	0	6	11	0	187
Mediums																					
3:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	5
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	5
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	4
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	1	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	1	0	1	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	1	1	0	0	0

All Traffic Data Services

29 BRYN MAWR DR & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BRYN MAWR DR					BRYN MAWR DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	32	196
6:15 AM	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	271
6:30 AM	0	3	54	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	60	365
6:45 AM	0	0	57	1	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	62	457
7:00 AM	0	3	98	2	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	107	559
7:15 AM	0	2	129	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	136	582
7:30 AM	0	5	140	1	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	152	568
7:45 AM	0	3	150	4	0	0	0	0	0	0	0	0	1	2	0	0	1	3	0	0	164	572
8:00 AM	0	3	125	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	130	531
8:15 AM	0	3	113	1	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	122	0
8:30 AM	0	6	146	1	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	156	0
8:45 AM	0	3	113	0	0	0	0	0	0	0	0	0	2	3	0	0	1	1	0	0	123	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	13	527	6	0	0	0	0	0	0	0	0	4	3	0	0	5	7	0	0	565
Mediums	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	0	13	544	6	0	0	0	0	0	0	0	0	4	3	0	0	5	7	0	0	582
Bicycles on Road	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.90					0.00					0.55					0.75			0.89
Peak Hour Factor (PHF)	0.00	0.63	0.91	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.58	0.00	0.00	0.88	0.58	0.00	0.00	0.89

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	31
6:15 AM	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
6:30 AM	0	3	52	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	58
6:45 AM	0	0	53	1	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	58
7:00 AM	0	3	96	2	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	105
7:15 AM	0	2	126	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	133
7:30 AM	0	5	136	1	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	148
7:45 AM	0	3	145	4	0	0	0	0	0	0	0	0	1	2	0	0	1	3	0	0	159
8:00 AM	0	3	120	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	125
8:15 AM	0	3	112	1	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	121
8:30 AM	0	6	140	1	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	150
8:45 AM	0	3	106	0	0	0	0	0	0	0	0	0	2	3	0	0	1	1	0	0	116
Mediums																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	2	1	3	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:45 AM	1	0	1	0	1	1	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	1	1	0	1	1
7:30 AM	0	0	0	2	0	2	0	0	0	0	1	1
7:45 AM	0	0	0	1	1	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	2	0	2	2	0	0	0	0	0	0

All Traffic Data Services

29 BRYN MAWR DR & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BRYN MAWR DR					BRYN MAWR DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	2	126	1	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	132	587
11:15 AM	0	3	133	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	139	621
11:30 AM	0	4	158	1	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	168	668
11:45 AM	0	6	133	1	0	0	0	0	0	0	0	0	2	2	0	0	1	3	0	0	148	664
12:00 PM	0	5	159	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	166	685
12:15 PM	0	5	177	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	186	656
12:30 PM	0	2	159	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	164	630
12:45 PM	0	3	157	2	0	0	0	0	0	0	0	0	1	2	0	0	2	2	0	0	169	654
1:00 PM	0	3	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	137	660
1:15 PM	0	14	138	1	0	0	0	0	0	0	0	0	1	1	0	0	3	2	0	0	160	0
1:30 PM	0	4	178	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	188	0
1:45 PM	0	6	161	2	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	175	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	14	645	3	0	0	0	0	0	0	0	0	1	6	0	0	3	3	0	0	675
Mediums	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	10
Total	0	15	652	3	0	0	0	0	0	0	0	0	1	6	0	0	3	5	0	0	685
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.92					0.00					0.50					0.67			0.92
Peak Hour Factor (PHF)	0.00	0.48	0.92	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.75	0.00	0.00	0.60	0.50	0.00	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	2	123	1	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	129
11:15 AM	0	3	131	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	137
11:30 AM	0	4	155	1	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	165
11:45 AM	0	6	132	1	0	0	0	0	0	0	0	0	2	2	0	0	1	3	0	0	147
12:00 PM	0	4	159	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	164
12:15 PM	0	5	173	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	182
12:30 PM	0	2	157	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	162
12:45 PM	0	3	156	2	0	0	0	0	0	0	0	0	1	2	0	0	2	1	0	0	167
1:00 PM	0	3	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136
1:15 PM	0	14	138	1	0	0	0	0	0	0	0	0	1	1	0	0	3	2	0	0	160
1:30 PM	0	4	176	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	186
1:45 PM	0	6	158	2	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	171
Mediums																					
11:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
12:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	2	2	0	0	0	3	0	3
11:15 AM	1	0	1	0	0	0	1	0	1	0	0	0
11:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	1	1	0	1	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
12:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:30 PM	2	1	3	0	1	1	0	6	6	0	0	0
12:45 PM	1	0	1	0	0	0	1	0	1	0	0	0
1:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

29 BRYN MAWR DR & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BRYN MAWR DR					BRYN MAWR DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	3	215	2	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	224	856
3:45 PM	0	5	190	1	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	0	202	838
4:00 PM	0	4	214	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	222	878
4:15 PM	0	2	201	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	208	881
4:30 PM	0	4	193	2	0	0	0	0	0	0	0	0	2	0	0	0	3	2	0	0	206	903
4:45 PM	0	1	236	2	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	242	901
5:00 PM	0	4	214	3	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	225	846
5:15 PM	0	2	223	3	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	230	795
5:30 PM	0	6	195	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	204	732
5:45 PM	0	4	178	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	187	0
6:00 PM	0	1	170	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	174	0
6:15 PM	0	4	157	2	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	167	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	11	862	10	0	0	0	0	0	0	0	0	5	0	0	0	5	6	0	0	899
Mediums	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	11	866	10	0	0	0	0	0	0	0	0	5	0	0	0	5	6	0	0	903
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.93					0.00					0.56					0.55			0.93
Peak Hour Factor (PHF)	0.00	0.67	0.92	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.38	0.00	0.00	0.42	0.50	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	3	215	2	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	224
3:45 PM	0	5	189	1	0	0	0	0	0	0	0	0	2	0	0	0	1	2	0	0	200
4:00 PM	0	4	209	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	217
4:15 PM	0	2	199	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	206
4:30 PM	0	4	193	2	0	0	0	0	0	0	0	0	2	0	0	0	3	2	0	0	206
4:45 PM	0	1	236	2	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	242
5:00 PM	0	4	211	3	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	222
5:15 PM	0	2	222	3	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	229
5:30 PM	0	6	195	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	204
5:45 PM	0	4	177	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	186
6:00 PM	0	1	169	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	173
6:15 PM	0	4	156	2	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	166
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	1	2	3
4:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	1	2	0	1	1	0	0	0
4:45 PM	0	0	0	1	0	1	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	2	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	1	0	1	1	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	1	1	0	3	3
6:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

30 GIRARD BLVD & LEAD AVE AM
Tuesday, June 4, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	2	36	2	0	0	6	10	0	0	0	0	3	6	0	65	423
6:15 AM	0	0	0	0	0	0	1	54	2	0	0	4	10	0	0	0	0	7	6	0	84	515
6:30 AM	0	0	0	0	0	0	1	66	3	0	0	9	19	0	0	0	0	6	5	0	109	630
6:45 AM	0	0	0	0	0	0	1	98	11	0	0	6	21	0	0	0	0	19	9	0	165	763
7:00 AM	0	0	0	0	0	0	2	93	3	0	0	2	27	0	0	0	0	22	8	0	157	892
7:15 AM	0	0	0	0	0	0	6	121	6	0	0	10	33	0	0	0	0	19	4	0	199	935
7:30 AM	0	0	0	0	0	0	7	139	11	0	0	15	37	0	0	0	0	25	8	0	242	967
7:45 AM	0	0	0	0	0	0	11	175	11	0	0	11	38	0	0	0	0	30	18	0	294	976
8:00 AM	0	0	0	0	0	0	6	121	4	0	0	9	30	0	0	0	0	22	8	0	200	957
8:15 AM	0	0	0	0	0	0	2	152	5	0	0	10	27	0	0	0	0	19	16	0	231	0
8:30 AM	0	0	0	0	0	0	4	156	5	0	0	15	38	0	0	0	0	18	15	0	251	0
8:45 AM	0	0	0	0	0	0	11	162	14	0	0	9	37	0	0	0	0	28	14	0	275	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	21	597	25	0	0	44	132	0	0	0	0	86	56	0	961
Mediums	0	0	0	0	0	0	2	7	0	0	0	1	1	0	0	0	0	3	1	0	15
Total	0	0	0	0	0	0	23	604	25	0	0	45	133	0	0	0	0	89	57	0	976
Bicycles on Road	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	0	0	6
Bicycles on Crosswalk			0					1					2					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.83					0.88					0.76			0.83
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.86	0.73	0.00	0.00	0.75	0.91	0.00	0.00	0.00	0.00	0.80	0.79	0.00	0.83

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	0	0	0	0	0	2	36	2	0	0	6	10	0	0	0	0	3	6	0	65
6:15 AM	0	0	0	0	0	0	1	53	2	0	0	4	10	0	0	0	0	7	6	0	83
6:30 AM	0	0	0	0	0	0	1	64	3	0	0	9	17	0	0	0	0	6	5	0	105
6:45 AM	0	0	0	0	0	0	1	97	11	0	0	6	20	0	0	0	0	18	9	0	162
7:00 AM	0	0	0	0	0	0	2	93	3	0	0	2	27	0	0	0	0	22	7	0	156
7:15 AM	0	0	0	0	0	0	6	119	6	0	0	10	32	0	0	0	0	18	4	0	195
7:30 AM	0	0	0	0	0	0	5	138	11	0	0	15	37	0	0	0	0	24	8	0	238
7:45 AM	0	0	0	0	0	0	10	173	11	0	0	11	38	0	0	0	0	29	18	0	290
8:00 AM	0	0	0	0	0	0	6	119	4	0	0	9	29	0	0	0	0	20	8	0	195
8:15 AM	0	0	0	0	0	0	2	151	5	0	0	10	27	0	0	0	0	19	15	0	229
8:30 AM	0	0	0	0	0	0	3	154	5	0	0	14	38	0	0	0	0	18	15	0	247
8:45 AM	0	0	0	0	0	0	11	158	14	0	0	8	36	0	0	0	0	26	14	0	267
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	4
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	4
7:30 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	4
7:45 AM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	4
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	5
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
8:30 AM	0	0	0	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	0	0	2	0	0	7
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	1	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	1	1	0	1	0	0	0

All Traffic Data Services

30 GIRARD BLVD & LEAD AVE Noon
Tuesday, June 4, 2024

Peak Hour
11:45 AM - 12:45 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

Time	LEAD AVE Eastbound					LEAD AVE Westbound					GIRARD BLVD Northbound					GIRARD BLVD Southbound						Rolling
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	1	0	0	0	0	4	126	16	0	0	8	47	0	0	0	0	31	18	0	251	1,069
11:15 AM	0	0	0	0	0	0	7	144	8	0	0	7	47	0	0	0	0	31	18	0	262	1,128
11:30 AM	0	0	0	0	0	0	5	138	10	0	0	9	32	0	0	0	0	32	20	0	246	1,156
11:45 AM	0	0	0	0	0	0	9	153	14	0	0	18	59	0	0	0	0	41	16	0	310	1,221
12:00 PM	0	0	0	0	0	0	10	179	6	0	0	9	43	0	0	0	0	48	15	0	310	1,216
12:15 PM	0	0	0	0	0	0	10	158	8	0	0	9	55	0	0	0	0	35	15	0	290	1,186
12:30 PM	0	0	0	0	0	0	9	155	6	0	0	11	50	0	0	1	0	46	33	0	311	1,180
12:45 PM	0	0	0	0	0	0	11	180	10	0	0	13	42	0	0	0	0	26	23	0	305	1,148
1:00 PM	0	0	0	0	0	0	10	167	11	0	0	10	28	0	0	0	0	35	19	0	280	1,110
1:15 PM	0	0	0	0	0	0	13	169	3	0	0	6	36	0	0	0	0	41	16	0	284	0
1:30 PM	0	0	0	0	0	0	5	163	5	0	0	16	39	0	0	0	0	34	17	0	279	0
1:45 PM	0	0	0	0	0	0	8	154	9	0	0	9	38	0	0	0	0	41	8	0	267	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	38	629	34	0	0	47	206	0	0	1	0	164	79	0	1,198
Mediums	0	0	0	0	0	0	0	16	0	0	0	0	1	0	0	0	0	6	0	0	23
Total	0	0	0	0	0	0	38	645	34	0	0	47	207	0	0	1	0	170	79	0	1,221
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.25					0.93					0.82					0.78			0.98
Peak Hour Factor (PHF)	0.00	0.25	0.00	0.00	0.00	0.00	0.83	0.94	0.75	0.00	0.00	0.65	0.88	0.00	0.00	0.25	0.00	0.89	0.69	0.00	0.98

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	0	1	0	0	0	0	4	123	16	0	0	8	47	0	0	0	0	31	17	0	247
11:15 AM	0	0	0	0	0	0	7	140	8	0	0	7	45	0	0	0	0	30	18	0	255
11:30 AM	0	0	0	0	0	0	5	134	10	0	0	9	32	0	0	0	0	31	20	0	241
11:45 AM	0	0	0	0	0	0	9	149	14	0	0	18	59	0	0	0	0	41	16	0	306
12:00 PM	0	0	0	0	0	0	10	174	6	0	0	9	43	0	0	0	0	44	15	0	301
12:15 PM	0	0	0	0	0	0	10	155	8	0	0	9	54	0	0	0	0	35	15	0	286
12:30 PM	0	0	0	0	0	0	9	151	6	0	0	11	50	0	0	1	0	44	33	0	305
12:45 PM	0	0	0	0	0	0	11	174	10	0	0	13	41	0	0	0	0	26	23	0	298
1:00 PM	0	0	0	0	0	0	10	159	11	0	0	10	28	0	0	0	0	34	19	0	271
1:15 PM	0	0	0	0	0	0	11	165	3	0	0	6	36	0	0	0	0	40	16	0	277
1:30 PM	0	0	0	0	0	0	5	162	5	0	0	16	38	0	0	0	0	33	17	0	276
1:45 PM	0	0	0	0	0	0	8	149	9	0	0	8	37	0	0	0	0	40	8	0	259
Mediums																					
11:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	4
11:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	6
11:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	5
11:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	4	0	0	9
12:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	6
12:45 PM	0	0	0	0	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	7
1:00 PM	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	9
1:15 PM	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	1	0	0	7
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
1:45 PM	0	0	0	0	0	0	0	4	0	0	0	1	1	0	0	0	0	1	0	0	7
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	1	0	1	1	0	1	0	1	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

30 GIRARD BLVD & LEAD AVE PM
Tuesday, June 4, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
04:45 PM - 05:00 PM

Traffic Counts - All Vehicles

Time	LEAD AVE Eastbound					LEAD AVE Westbound					GIRARD BLVD Northbound					GIRARD BLVD Southbound						Rolling
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	6	187	13	0	0	5	54	0	0	0	0	26	17	0	308	1,385
3:45 PM	0	0	0	0	0	0	10	200	15	0	0	13	46	0	0	0	0	43	20	0	347	1,431
4:00 PM	0	0	0	0	0	0	15	209	13	0	0	19	36	0	0	1	0	40	16	0	349	1,478
4:15 PM	0	0	0	0	0	0	10	230	8	0	0	12	56	0	0	0	0	41	24	0	381	1,520
4:30 PM	0	0	0	0	0	0	12	214	15	0	0	15	45	0	0	0	0	38	15	0	354	1,514
4:45 PM	0	0	0	0	0	0	9	249	15	0	0	12	54	0	0	0	0	40	15	0	394	1,526
5:00 PM	0	0	0	0	0	0	13	241	6	0	0	11	57	0	0	0	0	44	19	0	391	1,479
5:15 PM	0	0	0	0	0	0	7	221	5	0	0	10	52	0	0	0	0	53	27	0	375	1,349
5:30 PM	0	0	0	0	0	0	15	191	9	0	0	17	56	0	0	1	0	53	24	0	366	1,271
5:45 PM	0	0	0	0	0	0	9	205	10	0	0	6	38	0	0	0	0	52	27	0	347	0
6:00 PM	0	0	0	0	0	0	8	145	15	0	0	9	30	0	0	0	0	41	13	0	261	0
6:15 PM	0	0	0	0	0	0	8	157	12	0	0	13	40	0	0	0	0	47	20	0	297	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound					Westbound					Northbound					Southbound					
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	43	893	35	0	0	50	218	0	0	1	0	189	85	0	1,514
Mediums	0	0	0	0	0	0	1	9	0	0	0	0	1	0	0	0	0	1	0	0	12
Total	0	0	0	0	0	0	44	902	35	0	0	50	219	0	0	1	0	190	85	0	1,526
Bicycles on Road	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	1	1	0	8
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.94					0.92					0.94			0.97
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.94	0.85	0.00	0.00	0.78	0.96	0.00	0.00	0.25	0.00	0.95	0.90	0.00	0.97

Traffic Counts by Vehicle Type

Time	Eastbound					Westbound					Northbound					Southbound					
	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	6	186	13	0	0	5	54	0	0	0	0	25	17	0	306
3:45 PM	0	0	0	0	0	0	10	196	15	0	0	13	46	0	0	0	0	43	20	0	343
4:00 PM	0	0	0	0	0	0	15	207	13	0	0	19	36	0	0	1	0	40	16	0	347
4:15 PM	0	0	0	0	0	0	10	227	8	0	0	12	55	0	0	0	0	40	24	0	376
4:30 PM	0	0	0	0	0	0	12	210	15	0	0	15	45	0	0	0	0	38	15	0	350
4:45 PM	0	0	0	0	0	0	8	244	15	0	0	12	54	0	0	0	0	40	15	0	388
5:00 PM	0	0	0	0	0	0	13	237	6	0	0	11	56	0	0	0	0	43	19	0	385
5:15 PM	0	0	0	0	0	0	7	221	5	0	0	10	52	0	0	0	0	53	27	0	375
5:30 PM	0	0	0	0	0	0	15	191	9	0	0	17	56	0	0	1	0	53	24	0	366
5:45 PM	0	0	0	0	0	0	9	204	10	0	0	6	37	0	0	0	0	51	27	0	344
6:00 PM	0	0	0	0	0	0	8	142	15	0	0	9	30	0	0	0	0	41	13	0	258
6:15 PM	0	0	0	0	0	0	8	155	12	0	0	13	40	0	0	0	0	47	20	0	295
Mediums																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	4
4:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
6:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	4
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2

Bicycles on Crosswalk

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Time	Eastbound			Westbound			Northbound			Southbound		
	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	1	1	2	0	0	0	1	0	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	1

All Traffic Data Services

31 GIRARD BLVD & COAL AVE AM
Tuesday, June 4, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	4	39	0	0	0	0	0	0	0	0	0	12	0	0	0	1	4	0	0	60	354
6:15 AM	0	5	49	5	0	0	0	0	0	0	0	0	7	2	0	0	1	6	0	0	75	436
6:30 AM	0	4	48	4	0	0	0	0	0	0	0	0	24	2	0	0	1	7	0	0	90	534
6:45 AM	0	8	80	3	0	0	0	0	0	0	0	0	17	2	0	0	3	16	0	0	129	626
7:00 AM	0	7	84	3	0	0	0	0	0	0	0	0	22	2	0	0	3	21	0	0	142	719
7:15 AM	0	12	94	6	0	0	0	0	0	0	0	0	30	4	0	0	4	23	0	0	173	757
7:30 AM	0	10	86	3	0	0	0	0	0	0	0	0	40	12	0	0	4	27	0	0	182	779
7:45 AM	0	7	120	6	0	0	0	0	0	0	0	0	44	7	0	0	6	32	0	0	222	796
8:00 AM	0	10	107	5	0	0	0	0	0	0	0	0	30	4	0	0	5	19	0	0	180	803
8:15 AM	0	11	119	10	0	0	0	0	0	0	0	0	25	6	0	0	3	21	0	0	195	0
8:30 AM	0	17	112	6	0	0	0	0	0	0	0	0	33	6	0	0	5	20	0	0	199	0
8:45 AM	0	12	132	5	0	0	0	0	0	0	0	0	35	5	0	0	2	38	0	0	229	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	49	455	25	0	0	0	0	0	0	0	0	120	21	0	0	14	94	0	0	778
Mediums	0	1	15	1	0	0	0	0	0	0	0	0	3	0	0	0	1	4	0	0	25
Total	0	50	470	26	0	0	0	0	0	0	0	0	123	21	0	0	15	98	0	0	803
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.92					0.00					0.82					0.79			0.88
Peak Hour Factor (PHF)	0.00	0.74	0.89	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.60	0.00	0.00	0.79	0.80	0.00	0.00	0.88

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	4	39	0	0	0	0	0	0	0	0	0	12	0	0	0	1	4	0	0	60
6:15 AM	0	5	47	4	0	0	0	0	0	0	0	0	7	2	0	0	1	6	0	0	72
6:30 AM	0	4	47	4	0	0	0	0	0	0	0	0	22	1	0	0	1	7	0	0	86
6:45 AM	0	7	76	3	0	0	0	0	0	0	0	0	17	2	0	0	3	15	0	0	123
7:00 AM	0	7	82	3	0	0	0	0	0	0	0	0	22	2	0	0	3	21	0	0	140
7:15 AM	0	12	90	6	0	0	0	0	0	0	0	0	29	4	0	0	4	22	0	0	167
7:30 AM	0	10	84	3	0	0	0	0	0	0	0	0	40	12	0	0	2	26	0	0	177
7:45 AM	0	7	117	6	0	0	0	0	0	0	0	0	44	7	0	0	5	31	0	0	217
8:00 AM	0	10	103	5	0	0	0	0	0	0	0	0	29	4	0	0	5	18	0	0	174
8:15 AM	0	11	115	10	0	0	0	0	0	0	0	0	25	6	0	0	3	20	0	0	190
8:30 AM	0	17	109	5	0	0	0	0	0	0	0	0	32	6	0	0	4	20	0	0	193
8:45 AM	0	11	128	5	0	0	0	0	0	0	0	0	34	5	0	0	2	36	0	0	221
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4
6:45 AM	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	5
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5
8:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6
8:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
8:30 AM	0	0	3	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	6
8:45 AM	0	1	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	8
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	2	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0	0	1	1	2
7:30 AM	0	1	1	0	0	0	0	1	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

31 GIRARD BLVD & COAL AVE Noon
Tuesday, June 4, 2024

Peak Hour
11:45 AM - 12:45 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	24	115	5	0	0	0	0	0	0	0	0	35	4	0	0	7	28	0	0	218	973
11:15 AM	0	19	124	3	0	0	0	0	0	0	0	0	36	15	0	0	7	28	0	0	232	1,021
11:30 AM	0	16	146	14	0	0	0	0	0	0	0	0	26	7	0	0	8	30	0	0	247	1,094
11:45 AM	0	23	141	8	0	0	0	0	0	0	0	0	53	7	0	0	2	42	0	0	276	1,118
12:00 PM	0	23	125	9	0	0	0	0	0	0	0	0	35	9	0	0	12	53	0	0	266	1,108
12:15 PM	0	24	180	12	0	0	0	0	0	0	0	0	42	5	0	0	8	34	0	0	305	1,080
12:30 PM	0	19	142	14	0	0	0	0	0	0	0	0	38	7	0	0	12	39	0	0	271	1,000
12:45 PM	0	12	149	14	0	0	0	0	0	0	0	0	41	9	0	0	7	34	0	0	266	967
1:00 PM	0	11	143	6	0	0	0	0	0	0	0	0	27	6	0	0	6	39	0	0	238	943
1:15 PM	0	13	116	6	0	0	0	0	0	0	0	0	31	7	0	0	15	37	0	0	225	0
1:30 PM	0	17	130	3	0	0	0	0	0	0	0	0	40	5	0	0	15	28	0	0	238	0
1:45 PM	0	17	149	2	0	0	0	0	0	0	0	0	23	6	0	0	11	34	0	0	242	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	89	578	43	0	0	0	0	0	0	0	0	167	28	0	0	33	163	0	0	1,101
Mediums	0	0	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5	0	0	17
Total	0	89	588	43	0	0	0	0	0	0	0	0	168	28	0	0	34	168	0	0	1,118
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	5
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.84					0.00					0.82					0.78			0.92
Peak Hour Factor (PHF)	0.00	0.93	0.85	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.63	0.00	0.00	0.78	0.79	0.00	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	24	113	5	0	0	0	0	0	0	0	0	35	4	0	0	7	28	0	0	216
11:15 AM	0	19	121	3	0	0	0	0	0	0	0	0	34	15	0	0	7	27	0	0	226
11:30 AM	0	16	144	14	0	0	0	0	0	0	0	0	26	7	0	0	8	29	0	0	244
11:45 AM	0	23	139	8	0	0	0	0	0	0	0	0	53	7	0	0	2	42	0	0	274
12:00 PM	0	23	125	9	0	0	0	0	0	0	0	0	35	9	0	0	12	49	0	0	262
12:15 PM	0	24	174	12	0	0	0	0	0	0	0	0	41	5	0	0	8	34	0	0	298
12:30 PM	0	19	140	14	0	0	0	0	0	0	0	0	38	7	0	0	11	38	0	0	267
12:45 PM	0	12	144	14	0	0	0	0	0	0	0	0	40	8	0	0	7	34	0	0	259
1:00 PM	0	11	143	5	0	0	0	0	0	0	0	0	27	6	0	0	6	38	0	0	236
1:15 PM	0	13	113	6	0	0	0	0	0	0	0	0	31	7	0	0	14	35	0	0	219
1:30 PM	0	16	129	3	0	0	0	0	0	0	0	0	40	5	0	0	14	28	0	0	235
1:45 PM	0	17	148	2	0	0	0	0	0	0	0	0	23	6	0	0	11	33	0	0	240
Mediums																					
11:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	6
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
11:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
12:15 PM	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
12:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4
12:45 PM	0	0	5	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	7
1:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	6
1:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
1:00 PM	0	1	1	0	0	0	2	0	2	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:45 PM	0	1	1	0	0	0	0	0	0	0	0	0

All Traffic Data Services

31 GIRARD BLVD & COAL AVE PM
Tuesday, June 4, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	22	166	3	0	0	0	0	0	0	0	0	38	13	0	0	4	35	0	0	281	1,216
3:45 PM	0	13	170	10	0	0	0	0	0	0	0	0	45	9	0	0	6	43	0	0	296	1,265
4:00 PM	0	11	177	17	0	0	0	0	0	0	0	0	46	8	0	0	9	43	0	0	311	1,285
4:15 PM	0	22	189	10	0	0	0	0	0	0	0	0	47	8	0	0	9	43	0	0	328	1,359
4:30 PM	0	20	190	13	0	0	0	0	0	0	0	0	39	13	0	0	14	41	0	0	330	1,421
4:45 PM	0	21	185	9	0	0	0	0	0	0	0	0	46	9	0	0	7	39	0	0	316	1,434
5:00 PM	0	21	225	20	0	0	0	0	0	0	0	0	46	14	0	0	7	52	0	0	385	1,387
5:15 PM	0	19	252	13	0	0	0	0	0	0	0	0	44	8	0	0	16	38	0	0	390	1,229
5:30 PM	0	25	181	13	0	0	0	0	0	0	0	0	48	7	0	0	12	57	0	0	343	1,119
5:45 PM	0	13	156	8	0	0	0	0	0	0	0	0	28	5	0	0	12	47	0	0	269	0
6:00 PM	0	19	124	6	0	0	0	0	0	0	0	0	21	8	0	0	16	33	0	0	227	0
6:15 PM	0	18	161	11	0	0	0	0	0	0	0	0	33	2	0	0	8	47	0	0	280	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	86	839	55	0	0	0	0	0	0	0	0	183	38	0	0	42	184	0	0	1,427
Mediums	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	7
Total	0	86	843	55	0	0	0	0	0	0	0	0	184	38	0	0	42	186	0	0	1,434
Bicycles on Road	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.87					0.00					0.93					0.87			0.92
Peak Hour Factor (PHF)	0.00	0.86	0.85	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.79	0.00	0.00	0.88	0.85	0.00	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	22	165	3	0	0	0	0	0	0	0	0	38	12	0	0	4	34	0	0	278
3:45 PM	0	13	168	10	0	0	0	0	0	0	0	0	45	9	0	0	6	43	0	0	294
4:00 PM	0	11	175	17	0	0	0	0	0	0	0	0	46	8	0	0	9	43	0	0	309
4:15 PM	0	22	185	10	0	0	0	0	0	0	0	0	46	8	0	0	9	42	0	0	322
4:30 PM	0	20	187	13	0	0	0	0	0	0	0	0	39	13	0	0	14	41	0	0	327
4:45 PM	0	21	185	9	0	0	0	0	0	0	0	0	46	9	0	0	7	38	0	0	315
5:00 PM	0	21	225	20	0	0	0	0	0	0	0	0	45	14	0	0	7	51	0	0	383
5:15 PM	0	19	249	13	0	0	0	0	0	0	0	0	44	8	0	0	16	38	0	0	387
5:30 PM	0	25	180	13	0	0	0	0	0	0	0	0	48	7	0	0	12	57	0	0	342
5:45 PM	0	13	156	8	0	0	0	0	0	0	0	0	27	5	0	0	12	46	0	0	267
6:00 PM	0	19	123	6	0	0	0	0	0	0	0	0	21	8	0	0	16	33	0	0	226
6:15 PM	0	18	160	11	0	0	0	0	0	0	0	0	33	2	0	0	8	47	0	0	279
Mediums																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6
4:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
5:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
6:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	1	0	2	2

All Traffic Data Services

32 COLUMBIA DR & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					COLUMBIA DR					COLUMBIA DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	0	0	0	0	0	36	0	0	0	2	1	0	0	0	0	0	1	0	40	305
6:15 AM	0	0	0	0	0	0	2	53	3	0	0	0	3	0	0	0	0	0	2	0	63	385
6:30 AM	0	0	0	0	0	0	1	90	1	0	0	4	2	0	0	0	0	1	1	0	100	477
6:45 AM	0	0	0	0	0	0	2	94	1	0	0	1	1	0	0	0	0	1	2	0	102	607
7:00 AM	0	0	0	0	0	0	3	104	4	0	0	3	2	0	0	0	0	2	2	0	120	739
7:15 AM	0	0	0	0	0	0	3	138	1	0	0	4	2	0	0	0	0	3	4	0	155	817
7:30 AM	0	0	0	0	0	0	5	204	3	0	0	6	3	0	0	0	0	4	5	0	230	874
7:45 AM	0	0	0	0	0	0	3	212	3	0	0	8	2	0	0	0	0	1	5	0	234	853
8:00 AM	0	0	0	0	0	0	3	171	6	0	0	6	2	0	0	0	0	2	8	0	198	843
8:15 AM	0	0	0	0	0	0	4	200	3	0	0	1	1	0	0	0	0	0	3	0	212	0
8:30 AM	0	0	0	0	0	0	5	181	4	0	0	9	3	0	0	0	0	1	6	0	209	0
8:45 AM	0	0	0	0	0	0	6	186	5	0	0	7	8	0	0	0	0	3	9	0	224	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	15	781	14	0	0	21	8	0	0	0	0	7	21	0	867
Mediums	0	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
Total	0	0	0	0	0	0	15	787	15	0	0	21	8	0	0	0	0	7	21	0	874
Bicycles on Road	0	0	0	0	0	0	0	5	0	0	0	2	2	0	0	0	0	0	0	0	9
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.94					0.62					0.67			0.93
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.93	0.75	0.00	0.00	0.67	0.44	0.00	0.00	0.00	0.00	0.63	0.72	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	0	36	0	0	0	2	1	0	0	0	0	0	0	0	39
6:15 AM	0	0	0	0	0	0	2	53	3	0	0	0	3	0	0	0	0	0	2	0	63
6:30 AM	0	0	0	0	0	0	1	89	1	0	0	4	2	0	0	0	0	1	1	0	99
6:45 AM	0	0	0	0	0	0	2	93	1	0	0	1	1	0	0	0	0	1	2	0	101
7:00 AM	0	0	0	0	0	0	3	103	4	0	0	3	2	0	0	0	0	2	2	0	119
7:15 AM	0	0	0	0	0	0	3	137	1	0	0	4	2	0	0	0	0	3	4	0	154
7:30 AM	0	0	0	0	0	0	5	199	3	0	0	6	3	0	0	0	0	4	5	0	225
7:45 AM	0	0	0	0	0	0	3	212	3	0	0	8	2	0	0	0	0	1	5	0	234
8:00 AM	0	0	0	0	0	0	3	171	5	0	0	6	2	0	0	0	0	2	8	0	197
8:15 AM	0	0	0	0	0	0	4	199	3	0	0	1	1	0	0	0	0	0	3	0	211
8:30 AM	0	0	0	0	0	0	5	178	4	0	0	9	3	0	0	0	0	1	6	0	206
8:45 AM	0	0	0	0	0	0	6	186	5	0	0	7	8	0	0	0	0	3	9	0	224
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	1	1	0	1	1
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
6:30 AM	0	1	1	0	1	1	0	1	1	0	0	0
6:45 AM	0	2	2	0	1	1	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	2	2	4	1	0	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0	0	2	0	2

All Traffic Data Services

32 COLUMBIA DR & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					COLUMBIA DR					COLUMBIA DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	8	150	0	0	0	2	4	0	0	0	0	2	6	0	172	725
11:15 AM	0	0	0	0	0	0	8	151	3	0	0	2	1	0	0	0	0	2	2	0	169	777
11:30 AM	0	0	0	0	0	0	5	165	6	0	0	4	7	0	0	0	0	2	5	0	194	822
11:45 AM	0	0	0	0	0	0	2	171	5	0	0	3	3	0	0	0	0	1	5	0	190	837
12:00 PM	0	0	0	0	0	0	9	195	8	0	0	2	3	0	0	0	0	2	5	0	224	886
12:15 PM	0	0	0	0	0	0	5	188	4	0	0	3	8	0	0	1	0	4	1	0	214	854
12:30 PM	0	0	0	0	0	0	9	173	8	0	0	3	7	0	0	0	0	2	7	0	209	844
12:45 PM	0	0	0	0	0	0	0	217	6	0	0	1	6	0	0	0	0	1	8	0	239	829
1:00 PM	0	0	0	0	0	0	3	167	4	0	0	3	5	0	0	0	0	5	5	0	192	784
1:15 PM	0	0	0	0	0	0	6	174	5	0	0	3	5	0	0	0	0	5	6	0	204	0
1:30 PM	0	0	0	0	0	0	9	169	4	0	0	1	5	0	0	0	0	3	3	0	194	0
1:45 PM	0	0	0	0	0	0	4	175	1	0	0	1	6	0	0	0	0	2	5	0	194	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	0	0	0	0	23	759	26	0	0	9	24	0	0	1	0	9	21	0	872
Mediums	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	0	0	0	0	0	0	23	773	26	0	0	9	24	0	0	1	0	9	21	0	886
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.92					0.82					0.89			0.93
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.89	0.81	0.00	0.00	0.75	0.81	0.00	0.00	0.25	0.00	0.75	0.81	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	8	144	0	0	0	2	4	0	0	0	0	2	5	0	165
11:15 AM	0	0	0	0	0	0	8	146	3	0	0	2	1	0	0	0	0	2	2	0	164
11:30 AM	0	0	0	0	0	0	5	162	6	0	0	4	7	0	0	0	0	2	5	0	191
11:45 AM	0	0	0	0	0	0	2	167	5	0	0	3	3	0	0	0	0	1	5	0	186
12:00 PM	0	0	0	0	0	0	9	192	8	0	0	2	3	0	0	0	0	2	5	0	221
12:15 PM	0	0	0	0	0	0	5	183	4	0	0	3	8	0	0	1	0	4	1	0	209
12:30 PM	0	0	0	0	0	0	9	170	8	0	0	3	7	0	0	0	0	2	7	0	206
12:45 PM	0	0	0	0	0	0	0	214	6	0	0	1	6	0	0	0	0	1	8	0	236
1:00 PM	0	0	0	0	0	0	3	167	4	0	0	3	5	0	0	0	0	5	5	0	192
1:15 PM	0	0	0	0	0	0	6	173	5	0	0	3	5	0	0	0	0	5	6	0	203
1:30 PM	0	0	0	0	0	0	9	166	4	0	0	1	5	0	0	0	0	3	3	0	191
1:45 PM	0	0	0	0	0	0	4	174	1	0	0	1	6	0	0	0	0	1	5	0	192
Mediums																					
11:00 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	7
11:15 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
11:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
12:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	1	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	1	2	3
11:30 AM	0	0	0	1	0	1	0	0	0	0	1	1
11:45 AM	0	0	0	1	0	1	0	1	1	0	0	0
12:00 PM	0	1	1	0	0	0	1	0	1	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	1	0	1	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	1	0	1	1	0	0	0
1:15 PM	0	1	1	0	0	0	1	0	1	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	1	1	2
1:45 PM	0	0	0	2	0	2	1	0	1	1	0	1

All Traffic Data Services

32 COLUMBIA DR & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					COLUMBIA DR					COLUMBIA DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	2	204	2	0	0	2	5	0	0	0	0	2	4	0	221	1,025
3:45 PM	0	0	0	0	0	0	8	240	3	0	0	3	6	0	0	0	0	4	7	0	271	1,046
4:00 PM	0	0	0	0	0	0	10	251	2	0	0	3	9	0	0	0	0	3	3	0	281	1,030
4:15 PM	0	0	0	0	0	0	10	218	4	0	0	3	7	0	0	0	0	5	5	0	252	1,059
4:30 PM	0	0	0	0	0	0	8	220	0	0	0	4	2	0	0	0	0	3	5	0	242	1,071
4:45 PM	0	0	0	0	0	0	8	228	4	0	0	4	7	0	0	0	0	2	2	0	255	1,078
5:00 PM	0	0	0	0	0	0	9	273	7	0	0	2	6	0	0	0	0	6	7	0	310	1,082
5:15 PM	0	0	0	0	0	0	7	233	5	0	0	2	8	0	0	0	0	4	5	0	264	1,023
5:30 PM	0	0	0	0	0	0	7	214	8	0	0	4	7	0	0	0	0	4	5	0	249	1,005
5:45 PM	0	0	0	0	0	0	10	225	5	0	0	3	4	0	0	0	0	6	6	0	259	0
6:00 PM	0	0	0	0	0	0	5	220	8	0	0	5	2	0	0	0	0	4	7	0	251	0
6:15 PM	0	0	0	0	0	0	11	213	6	0	0	4	4	0	0	0	0	4	4	0	246	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	33	938	25	0	0	11	24	0	0	0	0	20	23	0	1,074
Mediums	0	0	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	0	0	0	8
Total	0	0	0	0	0	0	33	945	25	0	0	11	25	0	0	0	0	20	23	0	1,082
Bicycles on Road	0	0	0	0	0	0	0	6	1	0	0	0	1	0	0	0	0	1	0	0	9
Bicycles on Crosswalk			0					2					3					0			5
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.87					0.91					0.83			0.87
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.87	0.84	0.00	0.00	0.80	0.88	0.00	0.00	0.00	0.00	0.83	0.82	0.00	0.87

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	2	199	2	0	0	2	5	0	0	0	0	2	3	0	215
3:45 PM	0	0	0	0	0	0	8	235	3	0	0	3	6	0	0	0	0	4	7	0	266
4:00 PM	0	0	0	0	0	0	10	247	2	0	0	3	9	0	0	0	0	3	3	0	277
4:15 PM	0	0	0	0	0	0	10	213	4	0	0	3	7	0	0	0	0	5	5	0	247
4:30 PM	0	0	0	0	0	0	8	217	0	0	0	4	2	0	0	0	0	3	5	0	239
4:45 PM	0	0	0	0	0	0	7	222	4	0	0	4	7	0	0	0	0	2	2	0	248
5:00 PM	0	0	0	0	0	0	9	271	7	0	0	2	6	0	0	0	0	6	7	0	308
5:15 PM	0	0	0	0	0	0	7	231	5	0	0	2	8	0	0	0	0	4	5	0	262
5:30 PM	0	0	0	0	0	0	7	212	8	0	0	4	6	0	0	0	0	4	5	0	246
5:45 PM	0	0	0	0	0	0	10	224	5	0	0	3	4	0	0	0	0	6	6	0	258
6:00 PM	0	0	0	0	0	0	5	216	8	0	0	5	2	0	0	0	0	4	7	0	247
6:15 PM	0	0	0	0	0	0	11	212	6	0	0	4	4	0	0	0	0	4	4	0	245
Mediums																					
3:30 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	6
3:45 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
4:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	7
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	5
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	4
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	0	0	0	1	1	2	1	0	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	0	0	1	2	3
3:45 PM	1	0	1	1	0	1	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	1	1	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:45 PM	0	1	1	0	1	1	0	0	0	1	1	2
5:00 PM	1	0	1	0	2	2	0	0	0	1	2	3
5:15 PM	1	0	1	0	0	0	1	0	1	0	0	0
5:30 PM	0	0	0	2	0	2	1	0	1	0	0	0
5:45 PM	0	0	0	0	1	1	0	0	0	1	1	2
6:00 PM	0	0	0	0	1	1	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	1

All Traffic Data Services

33 STANFORD DR & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	28	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	29	186
6:15 AM	0	2	37	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	43	261
6:30 AM	0	1	45	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	49	369
6:45 AM	0	1	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	475
7:00 AM	0	4	97	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	104	549
7:15 AM	0	3	145	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	151	577
7:30 AM	0	2	146	2	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	155	556
7:45 AM	0	5	127	1	0	0	0	0	0	0	0	0	1	3	0	0	2	0	0	0	139	554
8:00 AM	0	4	122	1	0	0	0	0	0	0	0	0	2	0	0	0	1	2	0	0	132	551
8:15 AM	0	7	116	2	0	0	0	0	0	0	0	0	1	1	0	0	1	2	0	0	130	0
8:30 AM	0	2	149	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	153	0
8:45 AM	0	4	128	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	136	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	14	524	4	0	0	0	0	0	0	0	0	3	8	0	0	6	2	0	0	561
Mediums	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	0	14	540	4	0	0	0	0	0	0	0	0	3	8	0	0	6	2	0	0	577
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.93					0.00					0.75					0.75			0.93
Peak Hour Factor (PHF)	0.00	0.64	0.92	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.50	0.00	0.00	0.75	0.50	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	26	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	27
6:15 AM	0	2	36	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	42
6:30 AM	0	1	44	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	48
6:45 AM	0	1	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
7:00 AM	0	4	93	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	100
7:15 AM	0	3	142	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	148
7:30 AM	0	2	141	2	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	150
7:45 AM	0	5	124	1	0	0	0	0	0	0	0	0	1	3	0	0	2	0	0	0	136
8:00 AM	0	4	117	1	0	0	0	0	0	0	0	0	2	0	0	0	1	2	0	0	127
8:15 AM	0	7	115	2	0	0	0	0	0	0	0	0	1	1	0	0	1	2	0	0	129
8:30 AM	0	2	144	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	148
8:45 AM	0	3	124	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	130
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:45 AM	0	0	0	0	0	0	2	0	2	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:45 AM	0	0	0	0	1	1	1	0	1	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	1	1	1	2	1	0	1
7:30 AM	1	0	1	0	1	1	0	0	0	1	0	1
7:45 AM	0	0	0	1	0	1	0	3	3	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	1	2
8:45 AM	0	0	0	0	1	1	0	0	0	1	1	2

All Traffic Data Services

33 STANFORD DR & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	5	148	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	157	663
11:15 AM	0	3	164	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	172	694
11:30 AM	0	5	160	2	0	0	0	0	0	0	0	0	1	2	0	0	1	1	0	0	172	709
11:45 AM	0	4	152	1	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	162	721
12:00 PM	0	3	175	2	0	0	0	0	0	0	0	0	1	0	0	0	4	3	0	0	188	755
12:15 PM	0	5	179	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	187	720
12:30 PM	0	7	171	2	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	184	679
12:45 PM	0	3	185	1	0	0	0	0	0	0	0	0	1	0	0	0	4	2	0	0	196	689
1:00 PM	0	8	136	0	0	0	0	0	0	0	0	0	2	0	0	0	5	2	0	0	153	686
1:15 PM	0	3	134	2	0	0	0	0	0	0	0	0	1	3	0	0	3	0	0	0	146	0
1:30 PM	0	4	181	2	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	194	0
1:45 PM	0	4	176	2	0	0	0	0	0	0	0	0	2	2	0	0	2	5	0	0	193	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	18	703	6	0	0	0	0	0	0	0	0	4	1	0	0	11	5	0	0	748
Mediums	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	0	18	710	6	0	0	0	0	0	0	0	0	4	1	0	0	11	5	0	0	755
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.97					0.00					0.81					0.75			0.96
Peak Hour Factor (PHF)	0.00	0.72	0.96	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.67	0.00	0.25	0.75	0.40	0.00	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	5	143	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	152
11:15 AM	0	3	161	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	169
11:30 AM	0	5	157	2	0	0	0	0	0	0	0	0	1	2	0	0	1	1	0	0	169
11:45 AM	0	4	152	1	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	162
12:00 PM	0	3	173	2	0	0	0	0	0	0	0	0	1	0	0	0	4	3	0	0	186
12:15 PM	0	5	177	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	185
12:30 PM	0	7	169	2	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	182
12:45 PM	0	3	184	1	0	0	0	0	0	0	0	0	1	0	0	0	4	2	0	0	195
1:00 PM	0	7	135	0	0	0	0	0	0	0	0	0	2	0	0	0	5	2	0	0	151
1:15 PM	0	3	134	2	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	145
1:30 PM	0	4	176	2	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	189
1:45 PM	0	4	173	2	0	0	0	0	0	0	0	0	2	2	0	0	2	5	0	0	190
Mediums																					
11:00 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	1	1	0	0	0	2	0	2	2	0	2
11:15 AM	0	0	0	1	1	2	0	0	0	0	3	3
11:30 AM	0	0	0	0	0	0	0	1	1	0	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	1	2	0	2	0	2	2
12:15 PM	0	0	0	0	0	0	3	0	3	0	0	0
12:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	2	2	0	2	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

33 STANFORD DR & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					STANFORD DR					STANFORD DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	1	206	4	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	216	887
3:45 PM	0	2	200	2	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	208	874
4:00 PM	0	7	229	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	237	924
4:15 PM	0	5	217	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	226	937
4:30 PM	0	6	192	1	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	203	981
4:45 PM	0	8	239	2	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	258	992
5:00 PM	0	3	235	1	0	0	0	0	0	0	0	0	1	4	0	0	6	0	0	0	250	951
5:15 PM	0	7	253	2	0	0	0	0	0	0	0	0	1	1	0	0	4	2	0	0	270	901
5:30 PM	0	6	199	2	0	0	0	0	0	0	0	0	0	1	0	0	3	3	0	0	214	819
5:45 PM	0	5	195	4	0	0	0	0	0	0	0	0	4	3	0	0	4	2	0	0	217	0
6:00 PM	0	8	184	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	0	0	200	0
6:15 PM	0	4	176	2	0	0	0	0	0	0	0	0	1	2	0	0	1	2	0	0	188	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	24	923	7	0	0	0	0	0	0	0	0	6	7	0	0	14	8	0	0	989
Mediums	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	24	926	7	0	0	0	0	0	0	0	0	6	7	0	0	14	8	0	0	992
Bicycles on Road	0	0	8	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	0	0	12
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.91					0.00					0.54					1.00			0.92
Peak Hour Factor (PHF)	0.00	0.81	0.92	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.56	0.00	0.00	0.71	0.69	0.00	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	1	205	4	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	214
3:45 PM	0	1	198	2	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	205
4:00 PM	0	7	224	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	232
4:15 PM	0	5	216	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	225
4:30 PM	0	4	191	1	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	200
4:45 PM	0	8	239	2	0	0	0	0	0	0	0	0	4	1	0	0	1	3	0	0	258
5:00 PM	0	3	233	1	0	0	0	0	0	0	0	0	1	4	0	0	6	0	0	0	248
5:15 PM	0	7	253	2	0	0	0	0	0	0	0	0	1	1	0	0	4	2	0	0	270
5:30 PM	0	6	198	2	0	0	0	0	0	0	0	0	0	1	0	0	3	3	0	0	213
5:45 PM	0	5	194	4	0	0	0	0	0	0	0	0	4	3	0	0	4	2	0	0	216
6:00 PM	0	8	183	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	0	0	199
6:15 PM	0	4	175	2	0	0	0	0	0	0	0	0	1	2	0	0	1	2	0	0	187
Mediums																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
5:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
6:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	1	1	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	2	2	4	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	1	0	1	0	0	0	1	0	1
4:30 PM	0	1	1	0	0	0	0	0	0	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	2
5:00 PM	1	0	1	0	0	0	0	2	2	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	1	1
5:30 PM	0	0	0	1	1	2	0	0	0	2	1	3
5:45 PM	0	0	0	0	1	1	1	1	2	1	1	2
6:00 PM	0	0	0	0	0	0	2	0	2	0	1	1
6:15 PM	0	0	0	0	0	0	1	0	1	0	2	2

All Traffic Data Services

34 YALE BLVD & LEAD AVE AM
Tuesday, June 4, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	5	38	3	0	0	4	9	0	0	0	0	6	2	0	67	470
6:15 AM	0	0	0	0	0	0	14	49	3	0	0	4	12	0	0	0	0	7	1	0	90	547
6:30 AM	0	0	0	0	0	0	9	70	4	0	0	10	14	0	0	0	0	15	1	0	123	661
6:45 AM	0	0	0	0	0	0	20	114	3	0	0	15	17	0	0	0	0	18	3	0	190	770
7:00 AM	0	0	0	0	0	0	18	80	3	0	0	9	18	0	0	0	0	13	3	0	144	874
7:15 AM	0	0	0	0	0	0	25	126	1	0	0	15	21	0	0	0	0	15	1	0	204	983
7:30 AM	0	0	0	0	0	0	16	150	3	0	0	12	28	0	0	0	0	18	5	0	232	1,032
7:45 AM	0	0	0	0	0	0	33	177	7	0	0	19	27	0	0	0	0	21	10	0	294	1,073
8:00 AM	0	0	0	0	0	0	24	157	3	0	0	18	29	0	0	0	0	18	4	0	253	1,076
8:15 AM	0	0	0	0	0	0	15	179	2	0	0	18	20	0	0	0	0	14	5	0	253	0
8:30 AM	0	0	0	0	0	0	30	177	6	0	0	14	20	0	0	0	0	21	5	0	273	0
8:45 AM	0	0	0	0	0	0	31	174	7	0	0	23	40	0	0	0	0	20	2	0	297	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	100	679	17	0	0	71	103	0	0	0	0	70	16	0	1,056
Mediums	0	0	0	0	0	0	0	8	1	0	0	2	6	0	0	0	0	3	0	0	20
Total	0	0	0	0	0	0	100	687	18	0	0	73	109	0	0	0	0	73	16	0	1,076
Bicycles on Road	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			4					3					0					1			8
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.72					0.79			0.91
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.96	0.64	0.00	0.00	0.79	0.68	0.00	0.00	0.00	0.00	0.88	0.60	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	5	38	3	0	0	4	9	0	0	0	0	6	2	0	67
6:15 AM	0	0	0	0	0	0	14	49	3	0	0	4	11	0	0	0	0	7	1	0	89
6:30 AM	0	0	0	0	0	0	9	69	4	0	0	9	13	0	0	0	0	13	1	0	118
6:45 AM	0	0	0	0	0	0	20	112	3	0	0	15	15	0	0	0	0	17	3	0	185
7:00 AM	0	0	0	0	0	0	18	79	3	0	0	9	15	0	0	0	0	13	3	0	140
7:15 AM	0	0	0	0	0	0	25	125	1	0	0	15	19	0	0	0	0	12	1	0	198
7:30 AM	0	0	0	0	0	0	16	150	3	0	0	12	27	0	0	0	0	15	5	0	228
7:45 AM	0	0	0	0	0	0	33	175	7	0	0	19	23	0	0	0	0	20	10	0	287
8:00 AM	0	0	0	0	0	0	24	156	3	0	0	17	28	0	0	0	0	18	4	0	250
8:15 AM	0	0	0	0	0	0	15	178	2	0	0	17	18	0	0	0	0	13	5	0	248
8:30 AM	0	0	0	0	0	0	30	173	5	0	0	14	19	0	0	0	0	20	5	0	266
8:45 AM	0	0	0	0	0	0	31	172	7	0	0	23	38	0	0	0	0	19	2	0	292
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	4
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	5
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	1	0	0	7
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	5
8:30 AM	0	0	0	0	0	0	0	4	1	0	0	0	1	0	0	0	0	1	0	0	7
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	5
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	1	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	1	2	0	0	0	0	0	0
6:45 AM	0	0	0	2	0	2	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	2	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	2	2	0	0	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	1	1	0	1	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	0	0	0	1	1
6:15 AM	0	1	1	0	2	2	0	2	2	0	0	0
6:30 AM	1	2	3	2	0	2	0	2	2	0	0	0
6:45 AM	1	3	4	0	2	2	0	0	0	0	0	0
7:00 AM	1	0	1	0	1	1	0	0	0	0	1	1
7:15 AM	1	0	1	1	0	1	0	0	0	0	0	0
7:30 AM	1	0	1	0	5	5	1	1	2	0	0	0
7:45 AM	0	1	1	2	3	5	0	0	0	0	0	0
8:00 AM	0	2	2	3	0	3	0	0	0	0	1	1
8:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:30 AM	2	0	2	1	2	3	0	2	2	0	0	0
8:45 AM	0	1	1	1	2	3	0	2	2	0	0	0

All Traffic Data Services

34 YALE BLVD & LEAD AVE Noon
Tuesday, June 4, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	35	102	6	0	0	20	40	0	0	0	0	33	5	0	241	1,129
11:15 AM	0	0	0	0	0	0	40	141	5	0	0	21	49	0	0	0	0	29	8	0	293	1,217
11:30 AM	0	0	0	0	0	0	42	131	4	0	0	17	45	0	0	0	0	29	6	0	274	1,231
11:45 AM	0	0	0	0	0	0	32	160	12	0	0	23	50	0	0	0	0	30	14	0	321	1,285
12:00 PM	0	0	0	0	0	0	41	155	7	0	0	19	57	0	0	0	0	37	13	0	329	1,306
12:15 PM	0	0	0	0	0	0	40	136	6	0	0	28	46	0	0	0	0	39	12	0	307	1,298
12:30 PM	0	0	0	0	0	0	53	151	8	0	0	14	58	0	0	0	0	33	11	0	328	1,328
12:45 PM	0	0	0	0	0	0	55	162	6	0	0	15	52	0	0	0	0	33	19	0	342	1,316
1:00 PM	0	0	0	0	0	0	44	159	5	0	0	11	44	0	0	0	0	47	11	0	321	1,257
1:15 PM	0	0	0	0	0	0	50	161	6	0	0	17	49	0	0	0	0	43	11	0	337	0
1:30 PM	0	0	0	0	0	0	50	154	4	0	0	21	42	0	0	0	0	34	11	0	316	0
1:45 PM	0	0	0	0	0	0	46	146	3	0	0	17	31	0	0	0	0	27	13	0	283	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
Lights	0	0	0	0	0	0	200	612	23	0	0	57	195	0	0	0	0	151	51	0	1,289
Mediums	0	0	0	0	0	0	2	20	2	0	0	0	8	0	0	0	0	4	1	0	37
Total	0	0	0	0	0	0	202	633	25	0	0	57	203	0	0	0	0	156	52	0	1,328
Bicycles on Road	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			3					2					0					0			5
Heavy Vehicle Percentage			0.0%					0.1%					0.0%					0.5%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.00					0.96					0.97					0.90			0.97
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.98	0.69	0.00	0.00	0.78	0.92	0.00	0.00	0.00	0.00	0.84	0.72	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	0	0	0	0	0	0	33	99	6	0	0	20	38	0	0	0	0	33	5	0	234
11:15 AM	0	0	0	0	0	0	38	139	5	0	0	21	46	0	0	0	0	29	8	0	286
11:30 AM	0	0	0	0	0	0	39	128	4	0	0	16	42	0	0	0	0	27	6	0	262
11:45 AM	0	0	0	0	0	0	32	155	12	0	0	22	49	0	0	0	0	27	14	0	311
12:00 PM	0	0	0	0	0	0	40	151	7	0	0	18	56	0	0	0	0	34	13	0	319
12:15 PM	0	0	0	0	0	0	39	135	6	0	0	26	44	0	0	0	0	35	12	0	297
12:30 PM	0	0	0	0	0	0	52	145	8	0	0	14	57	0	0	0	0	33	11	0	320
12:45 PM	0	0	0	0	0	0	55	159	4	0	0	15	49	0	0	0	0	32	18	0	332
1:00 PM	0	0	0	0	0	0	44	151	5	0	0	11	43	0	0	0	0	45	11	0	310
1:15 PM	0	0	0	0	0	0	49	157	6	0	0	17	46	0	0	0	0	41	11	0	327
1:30 PM	0	0	0	0	0	0	49	153	4	0	0	20	38	0	0	0	0	34	11	0	309
1:45 PM	0	0	0	0	0	0	44	142	3	0	0	17	29	0	0	0	0	26	13	0	274
Mediums																					
11:00 AM	0	0	0	0	0	0	2	3	0	0	0	0	2	0	0	0	0	0	0	0	7
11:15 AM	0	0	0	0	0	0	2	1	0	0	0	0	3	0	0	0	0	0	0	0	6
11:30 AM	0	0	0	0	0	0	3	3	0	0	0	1	3	0	0	0	0	2	0	0	12
11:45 AM	0	0	0	0	0	0	0	5	0	0	0	1	1	0	0	0	0	3	0	0	10
12:00 PM	0	0	0	0	0	0	1	4	0	0	0	1	1	0	0	0	0	3	0	0	10
12:15 PM	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	4	0	0	10
12:30 PM	0	0	0	0	0	0	1	6	0	0	0	0	1	0	0	0	0	0	0	0	8
12:45 PM	0	0	0	0	0	0	0	3	2	0	0	0	3	0	0	0	0	1	1	0	10
1:00 PM	0	0	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	2	0	0	10
1:15 PM	0	0	0	0	0	0	1	4	0	0	0	0	3	0	0	0	0	1	0	0	9
1:30 PM	0	0	0	0	0	0	1	1	0	0	0	1	3	0	0	0	0	0	0	0	6
1:45 PM	0	0	0	0	0	0	1	4	0	0	0	0	2	0	0	0	0	1	0	0	8
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:45 AM	0	1	1	1	0	1	1	0	1	0	0	0
12:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	1	0	1	1	0	0	0	0	0	0
12:45 PM	0	2	2	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	1	1	2	0	0	0	0	0	0
1:45 PM	1	0	1	0	1	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:15 AM	1	2	3	0	0	0	0	0	0	1	0	1
11:30 AM	2	1	3	1	2	3	1	0	1	1	0	1
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	3	2	5	1	0	1	0	0	0
12:15 PM	4	1	5	4	1	5	0	1	1	0	0	0
12:30 PM	0	2	2	2	1	3	0	1	1	0	0	0
12:45 PM	0	0	0	2	1	3	0	0	0	0	0	0
1:00 PM	0	1	1	1	0	1	0	0	0	0	0	0
1:15 PM	1	1	2	1	0	1	0	0	0	0	0	0
1:30 PM	0	1	1	1	2	3	0	1	1	0	0	0
1:45 PM	1	5	6	0	1	1	0	0	0	1	0	1

All Traffic Data Services

34 YALE BLVD & LEAD AVE PM
Tuesday, June 4, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	65	155	8	0	0	15	38	0	0	0	0	35	9	0	325	1,408
3:45 PM	0	0	0	0	0	0	55	175	6	0	0	15	46	0	0	0	0	33	7	0	337	1,433
4:00 PM	0	0	0	0	0	0	53	190	4	0	0	17	38	0	0	0	0	40	12	0	354	1,497
4:15 PM	0	0	0	0	0	0	62	187	11	0	0	31	55	0	0	0	0	38	8	0	392	1,570
4:30 PM	0	0	0	0	0	0	35	183	3	0	0	26	36	0	0	0	0	55	12	0	350	1,579
4:45 PM	0	0	0	0	0	0	48	223	9	0	0	29	47	0	0	0	0	36	9	0	401	1,588
5:00 PM	0	0	0	0	0	0	68	214	7	0	0	36	45	0	0	0	0	51	6	0	427	1,542
5:15 PM	0	0	0	0	0	0	53	208	7	0	0	26	60	0	0	0	0	35	12	0	401	1,449
5:30 PM	0	0	0	0	0	0	45	186	2	0	0	28	51	0	0	0	0	40	7	0	359	1,317
5:45 PM	0	0	0	0	0	0	57	174	8	0	0	24	44	0	0	0	0	37	11	0	355	0
6:00 PM	0	0	0	0	0	0	45	157	5	0	0	26	54	0	0	0	0	31	16	0	334	0
6:15 PM	0	0	0	0	0	0	54	126	4	0	0	19	33	0	0	0	0	25	8	0	269	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	213	822	25	0	0	119	198	0	0	0	0	158	34	0	1,569
Mediums	0	0	0	0	0	0	1	9	0	0	0	0	5	0	0	0	0	4	0	0	19
Total	0	0	0	0	0	0	214	831	25	0	0	119	203	0	0	0	0	162	34	0	1,588
Bicycles on Road	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	1	0	0	6
Bicycles on Crosswalk			1					3					1					0			5
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.94					0.81			0.93
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.93	0.68	0.00	0.00	0.85	0.87	0.00	0.00	0.00	0.00	0.82	0.72	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights																					
3:30 PM	0	0	0	0	0	0	65	151	8	0	0	15	37	0	0	0	0	34	9	0	319
3:45 PM	0	0	0	0	0	0	55	171	6	0	0	15	45	0	0	0	0	31	7	0	330
4:00 PM	0	0	0	0	0	0	53	187	4	0	0	17	37	0	0	0	0	40	12	0	350
4:15 PM	0	0	0	0	0	0	61	184	11	0	0	31	54	0	0	0	0	36	8	0	385
4:30 PM	0	0	0	0	0	0	34	179	3	0	0	26	35	0	0	0	0	54	12	0	343
4:45 PM	0	0	0	0	0	0	48	220	9	0	0	29	46	0	0	0	0	33	9	0	394
5:00 PM	0	0	0	0	0	0	67	209	7	0	0	36	44	0	0	0	0	51	6	0	420
5:15 PM	0	0	0	0	0	0	53	208	7	0	0	26	59	0	0	0	0	34	12	0	399
5:30 PM	0	0	0	0	0	0	45	185	2	0	0	28	49	0	0	0	0	40	7	0	356
5:45 PM	0	0	0	0	0	0	57	173	8	0	0	24	42	0	0	0	0	36	11	0	351
6:00 PM	0	0	0	0	0	0	44	155	5	0	0	25	53	0	0	0	0	31	16	0	329
6:15 PM	0	0	0	0	0	0	54	125	4	0	0	19	32	0	0	0	0	23	7	0	264
Mediums																					
3:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	6
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	2	0	0	7
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	2	0	0	6
4:30 PM	0	0	0	0	0	0	1	3	0	0	0	0	1	0	0	0	0	1	0	0	6
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	3	0	0	7
5:00 PM	0	0	0	0	0	0	1	5	0	0	0	0	1	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	0	0	4
6:00 PM	0	0	0	0	0	0	1	2	0	0	0	1	1	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	1	2	2	0	2	0	0	0	0	0	0
4:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	1	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	1	1	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	1	0	1	1	0	1	1	0	0	0
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
6:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	1	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	3	0	3	0	0	0	0	0	0
3:45 PM	1	2	3	1	0	1	0	0	0	0	0	0
4:00 PM	1	1	2	0	1	1	0	0	0	0	0	0
4:15 PM	1	1	2	0	1	1	0	0	0	0	0	0
4:30 PM	4	1	5	1	4	5	0	2	2	0	0	0
4:45 PM	3	1	4	2	0	2	0	0	0	0	0	0
5:00 PM	0	1	1	2	1	3	0	0	0	0	0	0
5:15 PM	3	0	3	2	1	3	0	0	0	2	0	2
5:30 PM	3	0	3	0	1	1	0	0	0	0	0	0
5:45 PM	1	1	2	1	0	1	1	1	2	0	1	1
6:00 PM	1	0	1	1	0	1	0	0	0	1	0	1
6:15 PM	1	2	3	1	1	2	0	1	1	0	0	0

All Traffic Data Services

35 YALE BLVD & COAL AVE AM
Tuesday, June 4, 2024

Peak Hour
08:00 AM - 09:00 AM
Peak 15-Minutes
08:45 AM - 09:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	4	20	2	0	0	0	0	0	0	0	0	10	17	0	0	2	17	0	0	72	441
6:15 AM	0	2	40	3	0	0	0	0	0	0	0	0	22	13	0	0	1	17	0	0	98	542
6:30 AM	0	5	39	6	0	0	0	0	0	0	0	0	21	18	0	0	1	24	0	0	114	630
6:45 AM	0	3	58	6	0	0	0	0	0	0	0	0	25	26	0	0	1	38	0	0	157	701
7:00 AM	0	4	67	8	0	0	0	0	1	0	0	0	27	37	0	0	4	25	0	0	173	788
7:15 AM	0	9	68	8	0	0	0	0	0	0	0	0	28	32	0	0	1	40	0	0	186	819
7:30 AM	0	2	70	8	0	0	0	0	0	0	0	0	39	28	0	0	3	35	0	0	185	863
7:45 AM	0	7	89	17	0	0	0	0	0	0	0	0	43	34	0	0	2	52	0	0	244	899
8:00 AM	0	8	69	4	0	0	0	0	0	0	0	0	45	37	0	0	5	36	0	0	204	937
8:15 AM	0	9	119	8	0	0	0	0	0	0	0	0	28	37	0	0	4	25	0	0	230	0
8:30 AM	0	4	90	8	0	0	1	0	0	0	0	0	32	32	0	0	3	51	0	0	221	0
8:45 AM	0	14	112	13	0	0	0	0	0	0	0	0	51	35	0	0	6	51	0	0	282	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Lights	0	34	380	33	0	0	1	0	0	0	0	0	149	137	0	0	18	160	0	0	912
Mediums	0	1	10	0	0	0	0	0	0	0	0	0	7	3	0	0	0	3	0	0	24
Total	0	35	390	33	0	0	1	0	0	0	0	0	156	141	0	0	18	163	0	0	937
Bicycles on Road	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			0					2					1					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.3%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.82					0.25					0.86					0.79			0.83
Peak Hour Factor (PHF)	0.00	0.63	0.82	0.60	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.76	0.95	0.00	0.00	0.75	0.79	0.00	0.00	0.83

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	2	19	2	0	0	0	0	0	0	0	0	10	17	0	0	2	16	0	0	68
6:15 AM	0	2	37	3	0	0	0	0	0	0	0	0	21	13	0	0	1	17	0	0	94
6:30 AM	0	5	39	6	0	0	0	0	0	0	0	0	21	18	0	0	1	23	0	0	113
6:45 AM	0	3	54	6	0	0	0	0	0	0	0	0	23	26	0	0	1	37	0	0	150
7:00 AM	0	4	65	8	0	0	0	0	1	0	0	0	24	36	0	0	3	25	0	0	166
7:15 AM	0	9	68	8	0	0	0	0	0	0	0	0	27	31	0	0	1	37	0	0	181
7:30 AM	0	2	69	8	0	0	0	0	0	0	0	0	37	27	0	0	3	33	0	0	179
7:45 AM	0	7	88	17	0	0	0	0	0	0	0	0	41	33	0	0	2	51	0	0	239
8:00 AM	0	8	65	4	0	0	0	0	0	0	0	0	42	37	0	0	5	36	0	0	197
8:15 AM	0	8	117	8	0	0	0	0	0	0	0	0	27	35	0	0	4	24	0	0	223
8:30 AM	0	4	89	8	0	0	1	0	0	0	0	0	30	31	0	0	3	51	0	0	217
8:45 AM	0	14	109	13	0	0	0	0	0	0	0	0	50	34	0	0	6	49	0	0	275
Mediums																					
6:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
6:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	7
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	3	1	0	0	1	0	0	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	5
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	2	0	0	6
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	5
8:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7
8:15 AM	0	1	2	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	7
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	7
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	1	1	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	2	2	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	2	0	2	1	0	1	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 AM	0	0	0	2	0	2	0	1	1	0	0	0
6:30 AM	1	0	1	3	2	5	1	0	1	0	1	1
6:45 AM	2	0	2	0	2	2	0	0	0	1	0	1
7:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	2	4	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	1	0	0	0	0	1	1
8:00 AM	0	0	0	0	1	1	0	0	0	1	0	1
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	1	0	1	0	0	0
8:45 AM	0	0	0	0	1	1	1	0	1	0	0	0

All Traffic Data Services

35 YALE BLVD & COAL AVE Noon
Tuesday, June 4, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	6	93	15	0	0	0	0	0	0	0	0	54	32	0	0	7	55	0	0	262	1,168
11:15 AM	0	13	123	18	0	0	0	0	0	0	0	0	48	36	0	0	7	55	0	0	300	1,264
11:30 AM	0	20	120	12	0	0	0	0	0	0	0	0	47	41	0	0	5	70	0	0	315	1,324
11:45 AM	0	9	116	9	0	0	0	0	0	0	0	0	54	41	0	0	9	53	0	0	291	1,361
12:00 PM	0	15	139	12	0	0	0	0	0	0	0	0	77	43	0	0	6	65	1	0	358	1,403
12:15 PM	0	9	153	9	0	0	0	0	0	0	0	0	63	48	0	0	9	69	0	0	360	1,372
12:30 PM	0	9	139	18	0	0	0	0	0	0	0	0	68	34	0	0	7	77	0	0	352	1,310
12:45 PM	0	9	116	14	0	0	0	0	0	0	0	0	66	30	0	0	13	85	0	0	333	1,266
1:00 PM	0	13	119	8	0	0	0	0	0	0	0	0	52	41	0	0	9	85	0	0	327	1,239
1:15 PM	0	10	110	14	0	0	0	0	0	0	0	0	45	36	0	0	8	75	0	0	298	0
1:30 PM	0	9	108	16	0	0	0	0	0	0	0	0	55	29	0	0	11	80	0	0	308	0
1:45 PM	0	10	131	8	0	0	0	0	0	0	0	0	44	40	0	0	6	67	0	0	306	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	41	538	53	0	0	0	0	0	0	0	0	265	155	0	0	35	283	1	0	1,371
Mediums	0	1	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	13	0	0	32
Total	0	42	547	53	0	0	0	0	0	0	0	0	274	155	0	0	35	296	1	0	1,403
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			4					1					0					0			5
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.94					0.00					0.89					0.93			0.97
Peak Hour Factor (PHF)	0.00	0.71	0.89	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.90	0.00	0.00	0.79	0.96	0.25	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights																					
11:00 AM	0	6	91	14	0	0	0	0	0	0	0	0	52	32	0	0	7	53	0	0	255
11:15 AM	0	12	120	18	0	0	0	0	0	0	0	0	46	35	0	0	6	50	0	0	287
11:30 AM	0	20	120	12	0	0	0	0	0	0	0	0	44	39	0	0	5	67	0	0	307
11:45 AM	0	9	116	9	0	0	0	0	0	0	0	0	53	41	0	0	9	50	0	0	287
12:00 PM	0	15	137	12	0	0	0	0	0	0	0	0	74	43	0	0	6	61	1	0	349
12:15 PM	0	9	151	9	0	0	0	0	0	0	0	0	61	48	0	0	9	63	0	0	350
12:30 PM	0	9	137	18	0	0	0	0	0	0	0	0	67	34	0	0	7	75	0	0	347
12:45 PM	0	8	113	14	0	0	0	0	0	0	0	0	63	30	0	0	13	84	0	0	325
1:00 PM	0	13	117	8	0	0	0	0	0	0	0	0	50	41	0	0	9	82	0	0	320
1:15 PM	0	10	108	14	0	0	0	0	0	0	0	0	41	35	0	0	8	73	0	0	289
1:30 PM	0	9	107	16	0	0	0	0	0	0	0	0	51	28	0	0	10	80	0	0	301
1:45 PM	0	10	131	8	0	0	0	0	0	0	0	0	42	40	0	0	6	64	0	0	301
Mediums																					
11:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	7
11:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	2	1	0	0	1	5	0	0	13
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	3	0	0	8
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
12:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	9
12:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6	0	0	10
12:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	5
12:45 PM	0	1	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	8
1:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	7
1:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	4	1	0	0	0	2	0	0	9
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	4	1	0	0	1	0	0	0	7
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	1	0	1	0	0	0
11:15 AM	1	1	2	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	1	0	1	1	0	0	0	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	2	2	0	1	1	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
1:45 PM	0	0	0	1	1	2	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	1	0	1	0	0	0
11:15 AM	0	0	0	1	0	1	0	0	0	2	0	2
11:30 AM	0	0	0	2	1	3	0	0	0	0	3	3
11:45 AM	1	0	1	2	0	2	0	0	0	3	1	4
12:00 PM	0	0	0	4	2	6	4	0	4	0	1	1
12:15 PM	0	0	0	0	0	0	0	0	0	4	4	8
12:30 PM	0	0	0	1	4	5	0	4	4	1	0	1
12:45 PM	0	0	0	1	2	3	0	0	0	0	0	0
1:00 PM	0	0	0	3	0	3	0	0	0	0	0	0
1:15 PM	2	0	2	1	4	5	1	0	1	0	0	0
1:30 PM	1	1	2	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	2	0	2	0	0	0	1	2	3

All Traffic Data Services

35 YALE BLVD & COAL AVE PM
Tuesday, June 4, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	11	141	17	0	0	0	0	1	0	0	0	60	49	0	0	7	91	0	0	377	1,533
3:45 PM	0	13	149	17	0	0	0	0	0	0	0	0	49	42	0	0	9	85	0	0	364	1,542
4:00 PM	0	7	182	13	0	0	0	0	0	0	0	0	58	40	0	0	5	80	0	0	385	1,588
4:15 PM	0	19	169	20	0	0	0	0	0	0	0	0	70	37	0	0	8	84	0	0	407	1,686
4:30 PM	0	6	168	8	0	0	0	0	0	0	0	0	65	44	0	0	18	77	0	0	386	1,772
4:45 PM	0	11	181	19	0	0	0	0	0	0	0	0	67	43	0	0	9	80	0	0	410	1,760
5:00 PM	0	17	229	17	0	0	0	0	0	0	0	0	69	56	0	0	7	88	0	0	483	1,706
5:15 PM	0	13	244	23	0	0	0	0	0	0	0	0	80	51	0	0	4	78	0	0	493	1,550
5:30 PM	0	10	161	9	0	0	0	0	0	0	0	0	78	31	0	0	6	79	0	0	374	1,397
5:45 PM	0	8	142	15	0	0	0	0	1	0	0	0	73	29	0	0	10	78	0	0	356	0
6:00 PM	0	9	125	13	0	0	0	0	0	0	0	0	59	36	0	0	11	74	0	0	327	0
6:15 PM	0	11	143	13	0	0	0	0	0	0	0	0	56	36	0	0	3	78	0	0	340	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	47	818	66	0	0	0	0	0	0	0	0	277	193	0	0	38	316	0	0	1,755
Mediums	0	0	4	1	0	0	0	0	0	0	0	0	4	1	0	0	0	7	0	0	17
Total	0	47	822	67	0	0	0	0	0	0	0	0	281	194	0	0	38	323	0	0	1,772
Bicycles on Road	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4
Bicycles on Crosswalk			1					2					1					1			5
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.84					0.25					0.91					0.98			0.90
Peak Hour Factor (PHF)	0.00	0.70	0.84	0.74	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.94	0.87	0.00	0.00	0.58	0.93	0.00	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights																					
3:30 PM	0	11	139	17	0	0	0	0	1	0	0	0	58	48	0	0	7	90	0	0	371
3:45 PM	0	13	148	17	0	0	0	0	0	0	0	0	49	41	0	0	9	83	0	0	360
4:00 PM	0	7	180	13	0	0	0	0	0	0	0	0	56	40	0	0	5	80	0	0	381
4:15 PM	0	19	166	20	0	0	0	0	0	0	0	0	68	37	0	0	8	83	0	0	401
4:30 PM	0	6	167	8	0	0	0	0	0	0	0	0	63	43	0	0	18	76	0	0	381
4:45 PM	0	11	181	18	0	0	0	0	0	0	0	0	67	43	0	0	9	77	0	0	406
5:00 PM	0	17	227	17	0	0	0	0	0	0	0	0	67	56	0	0	7	86	0	0	477
5:15 PM	0	13	243	23	0	0	0	0	0	0	0	0	80	51	0	0	4	77	0	0	491
5:30 PM	0	10	161	9	0	0	0	0	0	0	0	0	76	29	0	0	6	79	0	0	370
5:45 PM	0	8	142	15	0	0	0	0	1	0	0	0	71	29	0	0	10	77	0	0	353
6:00 PM	0	9	124	13	0	0	0	0	0	0	0	0	57	35	0	0	11	73	0	0	322
6:15 PM	0	11	142	13	0	0	0	0	0	0	0	0	54	36	0	0	3	76	0	0	335
Mediums																					
3:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	6
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	4
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
4:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	6
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	5
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	4
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	6
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	5
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:00 PM	1	1	2	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:30 PM	1	0	1	1	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	1	0	1	1
5:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:30 PM	1	0	1	1	2	3	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	1	1	2	1	0	1	3	0	3
3:45 PM	0	1	1	0	0	0	0	0	0	0	1	1
4:00 PM	1	0	1	1	1	2	2	0	2	1	1	2
4:15 PM	1	0	1	0	0	0	0	0	0	1	0	1
4:30 PM	2	0	2	1	1	2	0	0	0	0	0	0
4:45 PM	0	0	0	2	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	2	0	2	0	0	0	0	4	4
5:15 PM	1	0	1	2	2	4	2	0	2	0	5	5
5:30 PM	1	0	1	0	2	2	0	1	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	3	0	3	0	0	0	1	0	1	1	1	2
6:15 PM	0	1	1	0	0	0	0	0	0	0	0	0

All Traffic Data Services

36 BUENA VISTA DR & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	0	37	1	0	0	0	1	0	0	0	0	0	1	0	40	313
6:15 AM	0	0	0	0	0	0	3	48	1	0	0	4	1	0	0	0	0	0	1	0	58	387
6:30 AM	0	0	0	0	0	0	8	91	0	0	0	3	0	0	0	0	0	0	3	0	105	487
6:45 AM	0	0	0	0	0	0	6	97	0	0	0	6	0	0	0	0	0	1	0	0	110	604
7:00 AM	0	0	0	0	0	0	1	106	0	0	0	5	1	0	0	0	0	1	0	0	114	741
7:15 AM	0	0	0	0	0	0	3	147	2	0	0	3	1	0	0	0	0	0	2	0	158	829
7:30 AM	0	0	0	0	0	0	3	205	1	0	0	10	0	0	0	0	0	2	1	0	222	870
7:45 AM	0	0	0	0	0	0	5	225	0	0	0	8	2	0	0	0	0	2	5	0	247	826
8:00 AM	0	0	0	0	0	0	4	182	0	0	0	10	1	0	0	0	0	1	4	0	202	797
8:15 AM	0	0	0	0	0	0	4	187	3	0	0	2	1	0	0	0	0	1	1	0	199	0
8:30 AM	0	0	0	0	0	0	2	169	0	0	0	6	0	0	0	0	0	0	1	0	178	0
8:45 AM	0	0	0	0	0	0	8	203	1	0	0	4	1	0	0	0	0	0	1	0	218	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	16	794	4	0	0	30	3	0	0	0	0	6	11	0	864
Mediums	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	6
Total	0	0	0	0	0	0	16	799	4	0	0	30	4	0	0	0	0	6	11	0	870
Bicycles on Road	0	0	0	0	0	0	0	6	0	0	0	0	4	0	0	0	0	0	0	0	10
Bicycles on Crosswalk			0					1					1					0			2
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.89					0.80					0.61			0.88
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.89	0.33	0.00	0.00	0.78	0.50	0.00	0.00	0.00	0.00	0.75	0.60	0.00	0.88

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	0	37	1	0	0	0	1	0	0	0	0	0	1	0	40
6:15 AM	0	0	0	0	0	0	3	47	1	0	0	4	1	0	0	0	0	0	1	0	57
6:30 AM	0	0	0	0	0	0	8	90	0	0	0	3	0	0	0	0	0	0	3	0	104
6:45 AM	0	0	0	0	0	0	6	96	0	0	0	6	0	0	0	0	0	1	0	0	109
7:00 AM	0	0	0	0	0	0	1	105	0	0	0	5	1	0	0	0	0	0	0	0	112
7:15 AM	0	0	0	0	0	0	3	145	2	0	0	3	1	0	0	0	0	0	2	0	156
7:30 AM	0	0	0	0	0	0	3	202	1	0	0	10	0	0	0	0	0	2	1	0	219
7:45 AM	0	0	0	0	0	0	5	224	0	0	0	8	2	0	0	0	0	2	5	0	246
8:00 AM	0	0	0	0	0	0	4	182	0	0	0	10	1	0	0	0	0	1	4	0	202
8:15 AM	0	0	0	0	0	0	4	186	3	0	0	2	0	0	0	0	0	1	1	0	197
8:30 AM	0	0	0	0	0	0	2	166	0	0	0	4	0	0	0	0	0	0	1	0	173
8:45 AM	0	0	0	0	0	0	8	201	1	0	0	4	1	0	0	0	0	0	1	0	216
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	1	0	1	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	1	1	0	1	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	1	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	1	1	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	1	1	0	0	0	1	1	2
8:15 AM	0	0	0	1	0	1	0	0	0	0	1	1
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:45 AM	1	0	1	0	1	1	0	0	0	0	1	1

All Traffic Data Services

36 BUENA VISTA DR & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:15 PM - 01:15 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	0	0	0	0	6	135	0	0	0	10	4	0	0	0	0	1	1	0	157	699
11:15 AM	0	0	0	0	0	0	10	114	5	0	0	14	2	0	0	0	0	1	1	0	147	744
11:30 AM	0	0	0	0	0	0	5	153	3	0	0	13	7	0	0	0	0	2	1	0	184	805
11:45 AM	0	0	0	0	0	0	9	172	4	0	0	17	5	0	0	0	0	2	2	0	211	834
12:00 PM	0	0	0	0	0	0	5	179	2	0	0	13	2	0	0	0	0	1	0	0	202	857
12:15 PM	0	0	0	0	0	0	7	183	2	0	0	8	2	0	0	0	0	2	4	0	208	886
12:30 PM	0	0	0	0	0	0	2	174	3	0	0	23	5	0	0	0	0	3	3	0	213	860
12:45 PM	0	0	0	0	0	0	5	208	4	0	0	13	2	0	0	0	0	1	1	0	234	845
1:00 PM	0	0	0	0	0	0	8	181	3	0	0	33	2	0	0	0	0	1	3	0	231	810
1:15 PM	0	0	0	0	0	0	6	158	2	0	0	11	1	0	0	0	0	3	1	0	182	0
1:30 PM	0	0	0	0	0	0	1	175	3	0	0	14	4	0	0	0	0	0	1	0	198	0
1:45 PM	0	0	0	0	0	0	8	176	2	0	0	8	1	0	0	0	0	1	3	0	199	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	22	734	12	0	0	76	11	0	0	0	0	7	11	0	873
Mediums	0	0	0	0	0	0	0	12	0	0	0	1	0	0	0	0	0	0	0	0	13
Total	0	0	0	0	0	0	22	746	12	0	0	77	11	0	0	0	0	7	11	0	886
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.90					0.64					0.75			0.95
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.90	0.70	0.00	0.00	0.61	0.64	0.00	0.00	0.00	0.00	0.67	0.69	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	6	129	0	0	0	10	3	0	0	0	0	1	1	0	150
11:15 AM	0	0	0	0	0	0	10	110	5	0	0	12	2	0	0	0	0	1	1	0	141
11:30 AM	0	0	0	0	0	0	5	149	3	0	0	13	7	0	0	0	0	2	0	0	179
11:45 AM	0	0	0	0	0	0	9	167	4	0	0	17	5	0	0	0	0	2	2	0	206
12:00 PM	0	0	0	0	0	0	5	177	2	0	0	13	2	0	0	0	0	1	0	0	200
12:15 PM	0	0	0	0	0	0	7	177	2	0	0	8	2	0	0	0	0	2	4	0	202
12:30 PM	0	0	0	0	0	0	2	171	3	0	0	22	5	0	0	0	0	3	3	0	209
12:45 PM	0	0	0	0	0	0	5	207	4	0	0	13	2	0	0	0	0	1	1	0	233
1:00 PM	0	0	0	0	0	0	8	179	3	0	0	33	2	0	0	0	0	1	3	0	229
1:15 PM	0	0	0	0	0	0	6	157	2	0	0	11	1	0	0	0	0	3	1	0	181
1:30 PM	0	0	0	0	0	0	1	171	3	0	0	14	4	0	0	0	0	0	1	0	194
1:45 PM	0	0	0	0	0	0	8	175	1	0	0	8	1	0	0	0	0	1	3	0	197
Mediums																					
11:00 AM	0	0	0	0	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	7
11:15 AM	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	6
11:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	5
11:45 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
12:30 PM	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
1:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	1	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	2	0	2	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	2	2	0	0	0
11:30 AM	1	0	1	0	1	1	0	0	0	0	1	1
11:45 AM	0	0	0	1	0	1	0	0	0	0	0	0
12:00 PM	1	0	1	1	3	4	0	0	0	0	2	2
12:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:30 PM	1	3	4	0	1	1	0	0	0	0	0	0
12:45 PM	2	1	3	1	1	2	1	1	2	0	0	0
1:00 PM	2	0	2	0	1	1	0	0	0	0	0	0
1:15 PM	0	1	1	0	1	1	0	1	1	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	1	1	2	0	0	0	0	0	0	1	2	3

All Traffic Data Services

36 BUENA VISTA DR & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	0	0	0	0	0	2	182	1	0	0	15	1	0	0	0	0	2	0	0	203	944
3:45 PM	0	0	0	0	0	0	4	221	3	0	0	20	2	0	0	0	0	0	1	0	251	974
4:00 PM	0	0	0	0	0	0	2	224	2	0	0	29	1	0	0	0	0	1	2	0	261	985
4:15 PM	0	0	0	0	0	0	1	201	3	0	0	21	1	0	0	0	0	0	2	0	229	1,002
4:30 PM	0	0	0	0	0	0	1	203	2	0	0	20	4	0	0	0	0	1	2	0	233	1,020
4:45 PM	0	0	0	0	0	0	3	216	6	0	0	22	6	0	0	0	0	4	5	0	262	1,024
5:00 PM	0	0	0	0	0	0	6	235	3	0	0	18	11	0	0	0	0	2	3	0	278	993
5:15 PM	0	0	0	0	0	0	7	213	6	0	0	18	1	0	0	0	0	1	1	0	247	932
5:30 PM	0	0	0	0	0	0	1	213	0	0	0	16	4	0	0	0	0	0	3	0	237	910
5:45 PM	0	0	0	0	0	0	3	209	2	0	0	11	2	0	0	0	0	1	3	0	231	0
6:00 PM	0	0	0	0	0	0	3	192	2	0	0	17	1	0	0	0	0	2	0	0	217	0
6:15 PM	0	0	0	0	0	0	1	211	3	0	0	7	1	0	0	0	0	1	1	0	225	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	17	864	15	0	0	74	21	0	0	0	0	7	12	0	1,010
Mediums	0	0	0	0	0	0	0	13	0	0	0	0	1	0	0	0	0	0	0	0	14
Total	0	0	0	0	0	0	17	877	15	0	0	74	22	0	0	0	0	7	12	0	1,024
Bicycles on Road	0	0	0	0	0	0	1	5	2	0	0	1	2	0	0	0	0	2	0	0	13
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.87					0.53			0.92
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.93	0.71	0.00	0.00	0.79	0.50	0.00	0.00	0.00	0.00	0.50	0.60	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	2	178	1	0	0	15	1	0	0	0	0	2	0	0	199
3:45 PM	0	0	0	0	0	0	4	218	2	0	0	20	2	0	0	0	0	0	1	0	247
4:00 PM	0	0	0	0	0	0	2	220	2	0	0	29	1	0	0	0	0	1	2	0	257
4:15 PM	0	0	0	0	0	0	1	198	3	0	0	19	1	0	0	0	0	0	2	0	224
4:30 PM	0	0	0	0	0	0	1	201	2	0	0	20	4	0	0	0	0	1	2	0	231
4:45 PM	0	0	0	0	0	0	3	210	6	0	0	22	6	0	0	0	0	4	5	0	256
5:00 PM	0	0	0	0	0	0	6	232	3	0	0	18	10	0	0	0	0	2	3	0	274
5:15 PM	0	0	0	0	0	0	7	210	6	0	0	18	1	0	0	0	0	1	1	0	244
5:30 PM	0	0	0	0	0	0	1	212	0	0	0	16	4	0	0	0	0	0	3	0	236
5:45 PM	0	0	0	0	0	0	3	209	2	0	0	11	2	0	0	0	0	1	3	0	231
6:00 PM	0	0	0	0	0	0	3	187	2	0	0	17	1	0	0	0	0	2	0	0	212
6:15 PM	0	0	0	0	0	0	1	210	3	0	0	7	1	0	0	0	0	1	1	0	224
Mediums																					
3:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
3:45 PM	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	1	2	0	0	0	0	2	0	0	7
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	1	2	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	1	1	1	0	1	1	0	1
3:45 PM	0	1	1	1	0	1	0	0	0	1	0	1
4:00 PM	0	0	0	0	1	1	0	0	0	1	0	1
4:15 PM	0	1	1	1	0	1	0	0	0	0	0	0
4:30 PM	2	0	2	1	2	3	0	0	0	0	0	0
4:45 PM	0	3	3	0	1	1	0	0	0	1	1	2
5:00 PM	1	1	2	0	1	1	0	0	0	0	0	0
5:15 PM	0	2	2	1	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	1	0	0	0	1	2	3
5:45 PM	2	0	2	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	2	2	4
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

37 BUENA VISTA DR & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	1	21	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	28	238
6:15 AM	0	2	27	5	0	0	0	0	0	0	0	0	2	0	0	0	0	5	0	0	41	310
6:30 AM	0	3	52	13	0	0	0	0	0	0	0	0	2	1	0	0	0	6	0	0	77	413
6:45 AM	0	9	61	14	0	0	0	0	0	0	0	0	2	0	0	0	3	3	0	0	92	490
7:00 AM	0	1	83	10	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	100	552
7:15 AM	0	6	111	16	0	0	0	0	0	0	0	0	1	3	0	0	3	4	0	0	144	587
7:30 AM	0	5	124	10	0	0	0	0	0	0	0	0	7	2	0	0	2	4	0	0	154	574
7:45 AM	0	9	112	17	0	0	0	0	0	0	0	0	6	2	0	0	4	4	0	0	154	563
8:00 AM	0	4	105	13	0	0	0	0	0	0	0	0	5	1	0	0	1	6	0	0	135	567
8:15 AM	0	5	104	12	0	0	0	0	0	0	0	0	2	1	0	0	2	5	0	0	131	0
8:30 AM	0	3	108	18	0	0	0	0	0	0	0	0	7	3	0	0	1	3	0	0	143	0
8:45 AM	0	10	121	14	0	0	0	0	0	0	0	0	5	0	0	0	2	6	0	0	158	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	24	440	54	0	0	0	0	0	0	0	0	19	8	0	0	9	18	0	0	572
Mediums	0	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	14
Total	0	24	452	56	0	0	0	0	0	0	0	0	19	8	0	0	10	18	0	0	587
Bicycles on Road	0	0	3	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	7
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.96					0.00					0.68					0.88			0.95
Peak Hour Factor (PHF)	0.00	0.67	0.91	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.67	0.00	0.00	0.69	0.83	0.00	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	19	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	26
6:15 AM	0	2	26	5	0	0	0	0	0	0	0	0	2	0	0	0	0	5	0	0	40
6:30 AM	0	3	51	13	0	0	0	0	0	0	0	0	2	1	0	0	0	6	0	0	76
6:45 AM	0	9	58	14	0	0	0	0	0	0	0	0	2	0	0	0	3	3	0	0	89
7:00 AM	0	1	80	10	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	96
7:15 AM	0	6	108	16	0	0	0	0	0	0	0	0	1	3	0	0	3	4	0	0	141
7:30 AM	0	5	120	10	0	0	0	0	0	0	0	0	7	2	0	0	2	4	0	0	150
7:45 AM	0	9	109	15	0	0	0	0	0	0	0	0	6	2	0	0	3	4	0	0	148
8:00 AM	0	4	103	13	0	0	0	0	0	0	0	0	5	1	0	0	1	6	0	0	133
8:15 AM	0	4	101	12	0	0	0	0	0	0	0	0	2	1	0	0	1	5	0	0	126
8:30 AM	0	3	106	18	0	0	0	0	0	0	0	0	5	3	0	0	1	3	0	0	139
8:45 AM	0	10	118	14	0	0	0	0	0	0	0	0	5	0	0	0	2	6	0	0	155
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	2	2	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	1	1	1	1	2	0	0	0	0	0	0
7:00 AM	0	0	0	0	1	1	0	0	0	1	2	3
7:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:30 AM	0	3	3	0	0	0	0	1	1	1	0	1
7:45 AM	0	2	2	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:30 AM	1	1	2	0	0	0	1	1	2	0	1	1
8:45 AM	0	0	0	1	1	2	0	2	2	0	0	0

All Traffic Data Services

37 BUENA VISTA DR & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
11:15 AM - 12:15 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	5	124	13	0	0	0	0	0	0	0	0	9	4	0	0	2	6	0	0	163	748
11:15 AM	0	12	142	20	0	0	0	0	0	0	0	0	15	6	0	0	8	5	0	0	208	800
11:30 AM	0	12	142	8	0	0	0	0	0	0	0	0	9	4	0	0	4	3	0	0	182	764
11:45 AM	0	6	133	21	0	0	0	0	0	0	0	0	15	8	0	0	3	9	0	0	195	796
12:00 PM	0	7	170	12	0	0	0	0	0	0	0	0	9	9	0	0	1	7	0	0	215	796
12:15 PM	0	2	142	10	0	0	0	0	0	0	0	0	6	7	0	0	2	3	0	0	172	784
12:30 PM	0	9	158	13	0	0	0	0	0	0	0	0	16	10	0	0	2	6	0	0	214	799
12:45 PM	0	11	149	12	0	0	0	0	0	0	0	0	9	4	0	0	3	7	0	0	195	770
1:00 PM	0	3	150	10	0	0	0	0	0	0	0	0	23	4	0	0	5	8	0	0	203	755
1:15 PM	0	5	139	16	0	0	0	0	0	0	0	0	12	5	0	0	3	7	0	0	187	0
1:30 PM	0	6	151	8	0	0	0	0	0	0	0	0	11	5	0	0	1	3	0	0	185	0
1:45 PM	0	8	141	12	0	0	0	0	0	0	0	0	6	8	0	0	1	4	0	0	180	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	36	579	57	0	0	0	0	0	0	0	0	47	27	0	0	16	24	0	0	786
Mediums	0	1	8	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	13
Total	0	37	587	61	0	0	0	0	0	0	0	0	48	27	0	0	16	24	0	0	800
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	4
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.1%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.92					0.00					0.77					0.79			0.93
Peak Hour Factor (PHF)	0.00	0.77	0.91	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.85	0.00	0.00	0.53	0.88	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	5	118	13	0	0	0	0	0	0	0	0	9	4	0	0	1	6	0	0	156
11:15 AM	0	11	139	19	0	0	0	0	0	0	0	0	14	6	0	0	8	5	0	0	202
11:30 AM	0	12	140	6	0	0	0	0	0	0	0	0	9	4	0	0	4	3	0	0	178
11:45 AM	0	6	132	20	0	0	0	0	0	0	0	0	15	8	0	0	3	9	0	0	193
12:00 PM	0	7	168	12	0	0	0	0	0	0	0	0	9	9	0	0	1	7	0	0	213
12:15 PM	0	2	140	10	0	0	0	0	0	0	0	0	6	7	0	0	2	3	0	0	170
12:30 PM	0	9	156	13	0	0	0	0	0	0	0	0	15	10	0	0	2	6	0	0	211
12:45 PM	0	11	149	11	0	0	0	0	0	0	0	0	9	4	0	0	3	7	0	0	194
1:00 PM	0	2	149	10	0	0	0	0	0	0	0	0	21	4	0	0	5	8	0	0	199
1:15 PM	0	5	138	16	0	0	0	0	0	0	0	0	12	5	0	0	3	7	0	0	186
1:30 PM	0	6	149	8	0	0	0	0	0	0	0	0	11	5	0	0	1	3	0	0	183
1:45 PM	0	8	138	12	0	0	0	0	0	0	0	0	6	8	0	0	1	4	0	0	177
Mediums																					
11:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7
11:15 AM	0	1	3	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
11:30 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
1:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	0	1	0	1	1	0	0	0	2	1	3
11:30 AM	3	0	3	1	1	2	1	0	1	0	0	0
11:45 AM	0	0	0	1	0	1	1	0	1	0	0	0
12:00 PM	6	0	6	0	0	0	2	2	4	0	4	4
12:15 PM	0	4	4	0	0	0	0	0	0	3	1	4
12:30 PM	0	1	1	1	0	1	1	0	1	0	0	0
12:45 PM	0	4	4	0	1	1	0	1	1	0	4	4
1:00 PM	1	0	1	2	0	2	1	0	1	1	2	3
1:15 PM	0	3	3	0	1	1	1	2	3	0	1	1
1:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
1:45 PM	1	1	2	0	1	1	0	0	0	0	0	0

All Traffic Data Services

37 BUENA VISTA DR & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BUENA VISTA DR					BUENA VISTA DR						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	2	180	18	0	0	0	0	0	0	0	0	11	3	0	0	2	4	0	0	220	976
3:45 PM	0	0	183	11	0	0	0	0	0	0	0	0	25	11	0	0	0	4	0	0	234	990
4:00 PM	0	13	209	13	0	0	0	0	0	0	0	0	23	8	0	0	3	3	0	0	272	1,017
4:15 PM	0	8	202	11	0	0	0	0	0	0	0	0	19	7	0	0	2	1	0	0	250	1,025
4:30 PM	0	5	188	11	0	0	0	0	0	0	0	0	17	5	0	0	4	4	0	0	234	1,059
4:45 PM	0	12	204	11	0	0	0	0	0	0	0	0	15	9	0	0	7	3	0	0	261	1,072
5:00 PM	0	12	223	6	0	0	0	0	0	0	0	0	17	12	0	0	4	6	0	0	280	1,024
5:15 PM	0	6	235	15	0	0	0	0	0	0	0	0	13	8	0	0	2	5	0	0	284	941
5:30 PM	0	8	207	9	0	0	0	0	0	0	0	0	12	7	0	0	2	2	0	0	247	834
5:45 PM	0	5	171	12	0	0	0	0	0	0	0	0	9	6	0	0	3	7	0	0	213	0
6:00 PM	0	4	168	4	0	0	0	0	0	0	0	0	9	6	0	0	2	4	0	0	197	0
6:15 PM	0	3	157	9	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	0	177	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	38	864	41	0	0	0	0	0	0	0	0	56	36	0	0	15	16	0	0	1,066
Mediums	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6
Total	0	38	869	41	0	0	0	0	0	0	0	0	57	36	0	0	15	16	0	0	1,072
Bicycles on Road	0	0	8	1	0	0	0	0	0	0	0	0	4	1	0	0	0	3	0	0	17
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.93					0.00					0.80					0.88			0.94
Peak Hour Factor (PHF)	0.00	0.73	0.92	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.75	0.00	0.00	0.61	0.71	0.00	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	2	179	18	0	0	0	0	0	0	0	0	11	3	0	0	2	4	0	0	219
3:45 PM	0	0	182	11	0	0	0	0	0	0	0	0	25	11	0	0	0	3	0	0	232
4:00 PM	0	11	204	13	0	0	0	0	0	0	0	0	23	8	0	0	3	3	0	0	265
4:15 PM	0	8	201	11	0	0	0	0	0	0	0	0	19	7	0	0	2	1	0	0	249
4:30 PM	0	5	186	11	0	0	0	0	0	0	0	0	17	5	0	0	3	4	0	0	231
4:45 PM	0	12	204	11	0	0	0	0	0	0	0	0	15	9	0	0	7	3	0	0	261
5:00 PM	0	12	220	6	0	0	0	0	0	0	0	0	16	12	0	0	4	6	0	0	276
5:15 PM	0	6	234	15	0	0	0	0	0	0	0	0	13	8	0	0	2	5	0	0	283
5:30 PM	0	8	206	9	0	0	0	0	0	0	0	0	12	7	0	0	2	2	0	0	246
5:45 PM	0	5	171	12	0	0	0	0	0	0	0	0	9	6	0	0	3	7	0	0	213
6:00 PM	0	4	167	4	0	0	0	0	0	0	0	0	9	6	0	0	2	4	0	0	196
6:15 PM	0	3	156	9	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	0	176
Mediums																					
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
5:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	7
5:15 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
5:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	1	2	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	1	1	0	0	0	1	0	1
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	1	0	0	0	7	0	7	0	0	0
4:30 PM	0	1	1	0	1	1	0	0	0	6	0	6
4:45 PM	1	1	2	1	3	4	0	1	1	0	1	1
5:00 PM	0	1	1	0	2	2	0	0	0	0	0	0
5:15 PM	2	0	2	0	0	0	2	0	2	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
6:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

38 UNIVERSITY BLVD & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	0	0	0	0	1	32	6	0	0	0	13	0	0	0	0	9	2	0	63	486
6:15 AM	0	0	0	0	0	0	2	54	5	0	0	0	19	0	0	0	0	21	3	0	104	608
6:30 AM	0	0	0	0	0	0	2	83	14	0	0	5	17	0	0	0	0	24	3	0	148	753
6:45 AM	0	0	0	0	0	0	8	96	5	0	0	2	20	0	0	0	0	39	1	0	171	945
7:00 AM	0	0	0	0	0	0	7	100	8	0	0	2	21	0	0	0	0	38	9	0	185	1,174
7:15 AM	0	0	0	0	0	0	13	125	18	0	0	5	35	0	0	1	0	45	7	0	249	1,311
7:30 AM	0	0	0	0	0	0	7	167	28	0	0	9	44	0	0	0	0	67	18	0	340	1,377
7:45 AM	0	0	0	0	0	0	19	202	26	0	0	9	62	0	0	0	0	69	13	0	400	1,340
8:00 AM	0	0	0	0	0	0	13	155	28	0	0	6	45	0	0	0	0	67	8	0	322	1,299
8:15 AM	0	0	0	0	0	0	11	155	24	0	0	8	52	0	0	0	0	53	12	0	315	0
8:30 AM	0	0	0	0	0	0	13	145	20	0	0	5	40	0	0	0	0	63	17	0	303	0
8:45 AM	0	0	0	0	0	0	24	166	22	0	0	9	50	0	0	0	0	77	11	0	359	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights	0	0	0	0	0	0	50	675	106	0	0	32	194	0	0	0	0	246	51	0	1,354
Mediums	0	0	0	0	0	0	0	4	0	0	0	0	9	0	0	0	0	9	0	0	22
Total	0	0	0	0	0	0	50	679	106	0	0	32	203	0	0	0	0	256	51	0	1,377
Bicycles on Road	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Crosswalk			1					1					1					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.3%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.85					0.83					0.88			0.86
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.84	0.95	0.00	0.00	0.89	0.82	0.00	0.00	0.25	0.00	0.84	0.71	0.00	0.86

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	1	32	6	0	0	0	13	0	0	0	0	9	2	0	63
6:15 AM	0	0	0	0	0	0	2	54	4	0	0	0	19	0	0	0	0	20	3	0	102
6:30 AM	0	0	0	0	0	0	2	81	14	0	0	5	16	0	0	0	0	21	3	0	142
6:45 AM	0	0	0	0	0	0	8	95	5	0	0	2	19	0	0	0	0	35	1	0	165
7:00 AM	0	0	0	0	0	0	7	99	7	0	0	2	20	0	0	0	0	35	8	0	178
7:15 AM	0	0	0	0	0	0	13	124	17	0	0	5	34	0	0	1	0	42	6	0	242
7:30 AM	0	0	0	0	0	0	7	165	28	0	0	9	41	0	0	0	0	66	18	0	334
7:45 AM	0	0	0	0	0	0	19	201	26	0	0	9	60	0	0	0	0	66	13	0	394
8:00 AM	0	0	0	0	0	0	13	155	28	0	0	6	44	0	0	0	0	63	8	0	317
8:15 AM	0	0	0	0	0	0	11	154	24	0	0	8	49	0	0	0	0	51	12	0	309
8:30 AM	0	0	0	0	0	0	13	141	20	0	0	5	38	0	0	0	0	61	15	0	293
8:45 AM	0	0	0	0	0	0	24	163	22	0	0	9	47	0	0	0	0	74	10	0	349
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3	0	0	6
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	4	0	0	6
7:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	3	1	0	7
7:15 AM	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	3	1	0	7
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	1	0	0	6
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	3	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	2	0	0	6
8:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	2	2	0	9
8:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	3	1	0	10
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	1	1	1	1	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	2	1	3	0	0	0	0	0	0
6:45 AM	0	0	0	1	2	3	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	1	1	0	1	1	0	0	0
7:30 AM	1	0	1	0	1	1	0	0	0	0	0	0
7:45 AM	0	3	3	0	0	0	0	0	0	1	0	1
8:00 AM	2	0	2	0	1	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	4	4	0	0	0	0	1	1
8:45 AM	1	0	1	0	2	2	0	1	1	0	0	0

All Traffic Data Services

38 UNIVERSITY BLVD & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:15 PM - 01:15 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	6	117	16	0	0	6	60	0	0	0	0	70	10	0	285	1,352
11:15 AM	0	0	0	0	0	0	19	104	17	0	0	25	67	0	0	0	0	84	10	0	326	1,446
11:30 AM	0	0	0	0	0	0	16	128	26	0	0	14	96	0	0	0	0	82	15	0	377	1,493
11:45 AM	0	0	0	0	0	0	19	153	21	0	0	9	65	0	0	0	0	82	15	0	364	1,505
12:00 PM	0	0	0	0	0	0	17	158	19	0	0	17	71	0	0	1	0	83	13	0	379	1,548
12:15 PM	0	0	0	0	0	0	26	162	19	0	0	12	66	0	0	0	0	76	12	0	373	1,563
12:30 PM	0	0	0	0	0	0	19	149	28	0	0	17	66	0	0	0	0	92	18	0	389	1,549
12:45 PM	0	0	0	0	0	0	21	165	31	0	0	13	75	0	0	1	0	89	12	0	407	1,529
1:00 PM	0	0	0	0	0	0	16	177	29	0	1	23	67	0	0	0	0	69	12	0	394	1,448
1:15 PM	0	0	0	0	0	0	13	139	21	0	0	18	90	0	0	0	0	64	14	0	359	0
1:30 PM	0	0	0	0	0	0	20	151	17	0	1	14	69	0	0	0	0	89	8	0	369	0
1:45 PM	0	0	0	0	0	0	16	160	11	0	0	10	45	0	0	0	0	64	20	0	326	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	81	641	106	0	1	64	267	0	0	1	0	312	51	0	1,524
Mediums	0	0	0	0	0	0	1	12	1	0	0	1	7	0	0	0	0	14	3	0	39
Total	0	0	0	0	0	0	82	653	107	0	1	65	274	0	0	1	0	326	54	0	1,563
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.95					0.86					0.90			0.96
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.92	0.88	0.00	0.50	0.77	0.84	0.00	0.00	0.50	0.00	0.92	0.81	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	5	114	14	0	0	6	59	0	0	0	0	66	10	0	274
11:15 AM	0	0	0	0	0	0	19	98	15	0	0	25	64	0	0	0	0	78	9	0	308
11:30 AM	0	0	0	0	0	0	16	125	26	0	0	14	92	0	0	0	0	82	14	0	369
11:45 AM	0	0	0	0	0	0	18	147	20	0	0	9	65	0	0	0	0	78	15	0	352
12:00 PM	0	0	0	0	0	0	17	156	19	0	0	17	70	0	0	1	0	81	10	0	371
12:15 PM	0	0	0	0	0	0	25	158	18	0	0	12	65	0	0	0	0	70	11	0	359
12:30 PM	0	0	0	0	0	0	19	148	28	0	0	17	64	0	0	0	0	90	18	0	384
12:45 PM	0	0	0	0	0	0	21	163	31	0	0	12	74	0	0	1	0	84	10	0	396
1:00 PM	0	0	0	0	0	0	16	172	29	0	1	23	64	0	0	0	0	68	12	0	385
1:15 PM	0	0	0	0	0	0	13	136	21	0	0	18	89	0	0	0	0	62	13	0	352
1:30 PM	0	0	0	0	0	0	20	146	17	0	1	14	68	0	0	0	0	84	7	0	357
1:45 PM	0	0	0	0	0	0	16	157	11	0	0	10	45	0	0	0	0	63	18	0	320
Mediums																					
11:00 AM	0	0	0	0	0	0	1	3	2	0	0	0	1	0	0	0	0	4	0	0	11
11:15 AM	0	0	0	0	0	0	0	6	2	0	0	0	3	0	0	0	0	4	1	0	16
11:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	0	1	0	8
11:45 AM	0	0	0	0	0	0	1	6	1	0	0	0	0	0	0	0	0	3	0	0	11
12:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	2	3	0	8
12:15 PM	0	0	0	0	0	0	1	4	1	0	0	0	1	0	0	0	0	6	1	0	14
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	5
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	5	2	0	11
1:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	3	0	0	0	0	1	0	0	9
1:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	2	1	0	7
1:30 PM	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	5	1	0	12
1:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	2	0	6
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:15 AM	0	0	0	1	1	2	0	3	3	0	0	0
11:30 AM	1	0	1	4	1	5	3	0	3	0	1	1
11:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
12:00 PM	0	0	0	0	2	2	0	0	0	0	1	1
12:15 PM	0	1	1	1	0	1	1	1	2	0	2	2
12:30 PM	0	1	1	2	0	2	0	1	1	0	0	0
12:45 PM	0	0	0	0	2	2	0	0	0	1	0	1
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:15 PM	0	1	1	1	1	2	0	1	1	0	0	0
1:30 PM	1	0	1	2	0	2	0	0	0	0	0	0
1:45 PM	0	2	2	2	0	2	0	0	0	0	0	0

All Traffic Data Services

38 UNIVERSITY BLVD & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	11	158	25	0	0	21	95	0	0	0	0	64	22	0	396	1,807
3:45 PM	0	0	0	0	0	0	11	212	25	0	0	18	99	0	0	1	0	94	32	0	492	1,873
4:00 PM	0	0	0	0	0	0	8	212	28	0	0	29	101	0	0	0	0	90	15	0	483	1,836
4:15 PM	0	0	0	0	0	0	8	207	22	0	0	24	64	0	0	0	0	94	17	0	436	1,886
4:30 PM	0	0	0	0	0	0	10	187	29	0	0	26	68	0	0	0	0	114	28	0	462	1,923
4:45 PM	0	0	0	0	0	0	14	210	25	0	0	18	77	0	0	0	0	89	22	0	455	1,898
5:00 PM	0	0	0	0	0	0	16	223	20	0	0	27	113	0	0	0	0	107	27	0	533	1,868
5:15 PM	0	0	0	0	0	0	13	202	22	0	1	22	64	0	0	0	0	126	23	0	473	1,692
5:30 PM	0	0	0	0	0	0	19	205	15	0	0	19	64	0	0	1	0	98	16	0	437	1,604
5:45 PM	0	0	0	0	0	0	11	205	16	0	0	12	48	0	0	0	0	119	14	0	425	0
6:00 PM	0	0	0	0	0	0	12	178	16	0	1	11	50	0	0	1	0	80	8	0	357	0
6:15 PM	0	0	0	0	0	0	8	194	16	0	0	12	44	0	0	0	0	100	11	0	385	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	53	812	93	0	1	93	319	0	0	0	0	431	99	0	1,901
Mediums	0	0	0	0	0	0	0	10	3	0	0	0	3	0	0	0	0	5	1	0	22
Total	0	0	0	0	0	0	53	822	96	0	1	93	322	0	0	0	0	436	100	0	1,923
Bicycles on Road	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			1					1					2					0			4
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.95					0.87					0.90			0.90
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.94	0.90	0.00	0.50	0.84	0.89	0.00	0.00	0.50	0.00	0.89	0.89	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	11	155	25	0	0	21	92	0	0	0	0	63	22	0	389
3:45 PM	0	0	0	0	0	0	11	210	25	0	0	18	97	0	0	1	0	93	30	0	485
4:00 PM	0	0	0	0	0	0	8	210	26	0	0	27	101	0	0	0	0	88	15	0	475
4:15 PM	0	0	0	0	0	0	8	204	21	0	0	22	63	0	0	0	0	91	17	0	426
4:30 PM	0	0	0	0	0	0	10	186	28	0	0	26	66	0	0	0	0	112	28	0	456
4:45 PM	0	0	0	0	0	0	14	205	24	0	0	18	77	0	0	0	0	87	22	0	447
5:00 PM	0	0	0	0	0	0	16	221	19	0	0	27	113	0	0	0	0	107	27	0	530
5:15 PM	0	0	0	0	0	0	13	200	22	0	1	22	63	0	0	0	0	125	22	0	468
5:30 PM	0	0	0	0	0	0	19	203	15	0	0	19	61	0	0	1	0	95	16	0	429
5:45 PM	0	0	0	0	0	0	11	200	16	0	0	12	48	0	0	0	0	117	14	0	418
6:00 PM	0	0	0	0	0	0	12	173	16	0	1	11	49	0	0	1	0	80	8	0	351
6:15 PM	0	0	0	0	0	0	8	193	16	0	0	12	44	0	0	0	0	97	11	0	381
Mediums																					
3:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	6
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	2	0	7
4:00 PM	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0	0	0	2	0	0	8
4:15 PM	0	0	0	0	0	0	0	3	1	0	0	2	1	0	0	0	0	2	0	0	9
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	2	0	0	6
4:45 PM	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	2	0	0	8
5:00 PM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	1	0	5
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	3	0	0	8
5:45 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	2	0	0	7
6:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	1	2	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	1	2	0	0	0
4:45 PM	0	1	1	0	1	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	0	0	0	1	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	3	0	3	2	0	2	1	0	1
3:45 PM	0	0	0	1	0	1	0	0	0	1	0	1
4:00 PM	0	1	1	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	1	2	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	1	2	0	0	0	0	1	1
5:45 PM	2	0	2	1	1	2	0	0	0	0	0	0
6:00 PM	7	1	8	0	0	0	0	0	0	1	1	2
6:15 PM	0	2	2	0	0	0	0	0	0	0	0	0

All Traffic Data Services

39 UNIVERSITY BLVD & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	1	29	4	0	0	1	0	0	0	0	0	12	2	0	0	1	9	0	0	59	432
6:15 AM	0	2	35	3	0	0	0	0	0	0	0	0	17	5	0	0	3	19	0	0	84	560
6:30 AM	0	2	66	8	0	0	0	0	0	0	0	0	15	5	0	0	4	20	0	0	120	734
6:45 AM	0	2	78	10	0	0	0	0	0	0	2	0	22	11	0	0	11	33	0	0	169	911
7:00 AM	0	8	87	23	0	0	0	0	0	0	0	0	20	10	0	0	8	31	0	0	187	1,069
7:15 AM	0	5	129	18	0	0	0	0	0	0	0	0	32	9	0	0	9	56	0	0	258	1,143
7:30 AM	0	5	122	36	0	0	0	0	0	0	0	0	46	21	0	0	12	55	0	0	297	1,138
7:45 AM	0	13	116	31	0	0	0	0	0	0	0	0	60	19	0	0	11	77	0	0	327	1,112
8:00 AM	0	9	92	19	0	0	0	0	0	0	0	0	49	18	0	0	14	60	0	0	261	1,113
8:15 AM	0	12	101	16	0	0	0	0	0	0	0	0	48	10	0	0	13	53	0	0	253	0
8:30 AM	0	7	114	27	0	0	0	0	0	0	0	0	39	16	0	0	17	51	0	0	271	0
8:45 AM	0	10	129	38	0	0	0	0	0	0	0	0	45	9	0	0	18	79	0	0	328	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Lights	0	31	450	104	0	0	0	0	0	0	0	0	181	63	0	0	46	235	0	0	1,110
Mediums	0	1	8	0	0	0	0	0	0	0	0	0	6	4	0	0	0	12	0	0	31
Total	0	32	459	104	0	0	0	0	0	0	0	0	187	67	0	0	46	248	0	0	1,143
Bicycles on Road	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.3%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.91					0.25					0.86					0.79			0.87
Peak Hour Factor (PHF)	0.00	0.79	0.89	0.75	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.00	0.85	0.81	0.00	0.00	0.86	0.81	0.00	0.00	0.87

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	27	4	0	0	1	0	0	0	0	0	12	2	0	0	1	9	0	0	57
6:15 AM	0	2	34	3	0	0	0	0	0	0	0	0	17	5	0	0	3	18	0	0	82
6:30 AM	0	2	66	8	0	0	0	0	0	0	0	0	14	4	0	0	4	17	0	0	115
6:45 AM	0	2	75	10	0	0	0	0	0	0	2	0	21	10	0	0	10	32	0	0	162
7:00 AM	0	7	85	23	0	0	0	0	0	0	0	0	20	10	0	0	8	28	0	0	181
7:15 AM	0	5	126	18	0	0	0	0	0	0	0	0	31	9	0	0	9	52	0	0	250
7:30 AM	0	5	120	36	0	0	0	0	0	0	0	0	43	19	0	0	12	54	0	0	289
7:45 AM	0	12	113	31	0	0	0	0	0	0	0	0	58	18	0	0	11	74	0	0	317
8:00 AM	0	9	91	19	0	0	0	0	0	0	0	0	49	17	0	0	14	55	0	0	254
8:15 AM	0	12	99	16	0	0	0	0	0	0	0	0	44	9	0	0	12	51	0	0	243
8:30 AM	0	6	112	27	0	0	0	0	0	0	0	0	37	15	0	0	17	48	0	0	262
8:45 AM	0	10	127	35	0	0	0	0	0	0	0	0	44	8	0	0	18	78	0	0	320
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	5
6:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	7
7:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	6
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	7
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	3	2	0	0	0	1	0	0	8
7:45 AM	0	1	3	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	10
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	6
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	4	1	0	0	1	2	0	0	10
8:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	7
8:45 AM	0	0	2	3	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	8
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:30 AM	1	0	1	1	0	1	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	1	2	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	1	0	1	0	0	0
6:15 AM	0	0	0	0	0	0	3	0	3	0	0	0
6:30 AM	0	0	0	0	0	0	7	0	7	0	0	0
6:45 AM	0	0	0	1	2	3	12	0	12	0	0	0
7:00 AM	0	0	0	0	0	0	4	0	4	0	1	1
7:15 AM	0	0	0	0	0	0	19	0	19	0	0	0
7:30 AM	1	0	1	0	2	2	3	1	4	0	1	1
7:45 AM	1	0	1	1	0	1	10	0	10	0	0	0
8:00 AM	0	0	0	0	0	0	2	1	3	0	0	0
8:15 AM	0	0	0	0	1	1	1	0	1	0	0	0
8:30 AM	0	0	0	0	2	2	6	0	6	0	0	0
8:45 AM	1	0	1	1	4	5	7	2	9	0	0	0

All Traffic Data Services

39 UNIVERSITY BLVD & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
11:15 AM - 12:15 PM
Peak 15-Minutes
11:15 AM - 11:30 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	7	111	23	0	0	0	0	0	0	0	0	59	22	0	0	15	61	0	0	298	1,365
11:15 AM	0	11	133	26	0	0	0	0	0	0	0	0	85	29	0	0	18	80	0	0	382	1,422
11:30 AM	0	13	121	21	0	0	0	0	0	0	0	0	74	19	0	0	14	79	0	0	341	1,358
11:45 AM	0	11	120	29	0	0	0	0	0	0	0	0	60	23	0	0	18	83	0	0	344	1,369
12:00 PM	0	4	124	20	0	0	0	0	0	0	0	0	78	26	0	0	31	72	0	0	355	1,391
12:15 PM	0	9	117	16	0	0	0	0	0	0	0	0	58	20	0	1	18	79	0	0	318	1,372
12:30 PM	0	8	124	20	0	0	0	0	0	0	0	0	69	29	0	0	24	78	0	0	352	1,417
12:45 PM	0	4	123	21	0	0	0	0	0	0	0	0	80	29	0	1	21	87	0	0	366	1,408
1:00 PM	0	15	125	35	0	0	0	0	0	0	0	0	58	27	0	0	15	61	0	0	336	1,327
1:15 PM	0	14	142	25	0	0	0	0	0	0	0	0	90	15	0	0	15	62	0	0	363	0
1:30 PM	0	5	128	9	0	0	0	0	0	0	0	0	68	20	0	0	26	87	0	0	343	0
1:45 PM	0	3	129	11	0	0	0	0	0	0	0	0	47	21	0	0	11	63	0	0	285	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Lights	0	38	489	95	0	0	0	0	0	0	0	0	289	96	0	0	79	305	0	0	1,391
Mediums	0	1	9	1	0	0	0	0	0	0	0	0	8	1	0	0	2	6	0	0	28
Total	0	39	498	96	0	0	0	0	0	0	0	0	297	97	0	0	81	314	0	0	1,422
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.8%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.91					0.00					0.91					0.94			0.93
Peak Hour Factor (PHF)	0.00	0.81	0.92	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.91	0.00	0.50	0.76	0.91	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	7	105	23	0	0	0	0	0	0	0	0	59	22	0	0	14	56	0	0	286
11:15 AM	0	10	130	26	0	0	0	0	0	0	0	0	83	29	0	0	16	76	0	0	370
11:30 AM	0	13	118	21	0	0	0	0	0	0	0	0	71	19	0	0	14	79	0	0	335
11:45 AM	0	11	120	28	0	0	0	0	0	0	0	0	58	22	0	0	18	79	0	0	336
12:00 PM	0	4	121	20	0	0	0	0	0	0	0	0	77	26	0	0	31	71	0	0	350
12:15 PM	0	9	116	16	0	0	0	0	0	0	0	0	56	20	0	1	17	73	0	0	308
12:30 PM	0	8	122	19	0	0	0	0	0	0	0	0	68	29	0	0	24	76	0	0	346
12:45 PM	0	4	123	20	0	0	0	0	0	0	0	0	78	27	0	1	21	83	0	0	357
1:00 PM	0	15	124	35	0	0	0	0	0	0	0	0	56	27	0	0	15	60	0	0	332
1:15 PM	0	14	142	25	0	0	0	0	0	0	0	0	89	14	0	0	15	61	0	0	360
1:30 PM	0	5	127	9	0	0	0	0	0	0	0	0	67	19	0	0	25	84	0	0	336
1:45 PM	0	3	126	11	0	0	0	0	0	0	0	0	47	21	0	0	11	62	0	0	281
Mediums																					
11:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	12
11:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	10
11:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	7
12:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	5
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	6	0	0	10
12:30 PM	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	6
12:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	2	2	0	0	0	4	0	0	9
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3	0	0	7
1:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	1	1	0	1	1	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	1	0	1	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	1	1	5	6	11	0	0	0
11:15 AM	0	0	0	3	1	4	11	5	16	0	0	0
11:30 AM	0	0	0	0	1	1	8	10	18	0	0	0
11:45 AM	0	0	0	0	1	1	2	10	12	0	0	0
12:00 PM	0	0	0	0	0	0	3	8	11	0	0	0
12:15 PM	0	0	0	1	2	3	6	12	18	0	0	0
12:30 PM	0	0	0	2	0	2	6	13	19	0	0	0
12:45 PM	0	0	0	0	2	2	10	12	22	0	0	0
1:00 PM	0	0	0	1	0	1	5	5	10	0	0	0
1:15 PM	0	0	0	1	1	2	14	8	22	0	0	0
1:30 PM	0	0	0	0	2	2	5	5	10	1	0	1
1:45 PM	0	0	0	2	0	2	6	6	12	0	0	0

All Traffic Data Services

39 UNIVERSITY BLVD & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE Eastbound					COAL AVE Westbound					UNIVERSITY BLVD Northbound					UNIVERSITY BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	7	152	13	0	0	0	0	0	0	0	0	100	28	0	1	23	52	0	0	376	1,599
3:45 PM	0	11	152	19	0	0	0	0	0	0	0	0	95	24	0	1	27	72	0	0	401	1,618
4:00 PM	0	7	173	13	0	0	0	0	0	0	0	0	97	25	0	0	26	68	0	0	409	1,588
4:15 PM	0	1	181	27	0	0	0	0	0	0	0	0	78	23	0	0	17	86	0	0	413	1,690
4:30 PM	0	9	151	18	0	0	0	0	0	0	0	0	72	27	0	0	34	84	0	0	395	1,745
4:45 PM	0	6	162	16	0	0	0	0	0	0	0	0	60	27	0	1	19	80	0	0	371	1,728
5:00 PM	0	12	213	20	0	0	0	0	0	0	0	0	113	37	0	0	30	86	0	0	511	1,731
5:15 PM	0	5	204	22	0	0	0	0	0	0	0	0	79	23	0	0	36	99	0	0	468	1,542
5:30 PM	0	6	161	14	0	0	0	0	0	0	0	0	59	14	0	0	26	98	0	0	378	1,408
5:45 PM	0	5	150	32	0	0	0	0	0	0	0	0	47	18	0	0	26	96	0	0	374	0
6:00 PM	0	8	141	25	0	0	0	0	0	0	0	0	43	13	0	0	16	76	0	0	322	0
6:15 PM	0	7	129	29	0	0	0	0	0	0	0	0	44	18	0	0	20	87	0	0	334	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	31	725	76	0	0	0	0	0	0	0	0	318	114	0	1	119	344	0	0	1,728
Mediums	0	1	5	0	0	0	0	0	0	0	0	0	6	0	0	0	0	5	0	0	17
Total	0	32	730	76	0	0	0	0	0	0	0	0	324	114	0	1	119	349	0	0	1,745
Bicycles on Road	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	7
Bicycles on Crosswalk			0					1					1					0			2
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.86					0.00					0.92					0.92			0.85
Peak Hour Factor (PHF)	0.00	0.67	0.87	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.77	0.00	0.50	0.83	0.96	0.00	0.00	0.85

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	7	152	13	0	0	0	0	0	0	0	0	97	27	0	1	23	51	0	0	371
3:45 PM	0	11	151	19	0	0	0	0	0	0	0	0	93	24	0	1	27	71	0	0	397
4:00 PM	0	7	170	12	0	0	0	0	0	0	0	0	94	24	0	0	25	66	0	0	398
4:15 PM	0	1	180	27	0	0	0	0	0	0	0	0	75	23	0	0	17	83	0	0	406
4:30 PM	0	8	149	18	0	0	0	0	0	0	0	0	70	27	0	0	34	83	0	0	389
4:45 PM	0	6	161	16	0	0	0	0	0	0	0	0	60	27	0	1	19	78	0	0	368
5:00 PM	0	12	211	20	0	0	0	0	0	0	0	0	112	37	0	0	30	85	0	0	507
5:15 PM	0	5	204	22	0	0	0	0	0	0	0	0	76	23	0	0	36	98	0	0	464
5:30 PM	0	5	160	14	0	0	0	0	0	0	0	0	58	14	0	0	26	96	0	0	373
5:45 PM	0	5	150	32	0	0	0	0	0	0	0	0	47	18	0	0	26	94	0	0	372
6:00 PM	0	8	140	25	0	0	0	0	0	0	0	0	42	13	0	0	16	76	0	0	320
6:15 PM	0	7	128	28	0	0	0	0	0	0	0	0	44	18	0	0	20	84	0	0	329
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	4
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
4:00 PM	0	0	3	1	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	10
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	6
4:30 PM	0	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	6
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	1	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	1	1	2	3	5	8	0	1	1
3:45 PM	0	0	0	0	0	0	2	5	7	0	0	0
4:00 PM	0	0	0	1	0	1	2	9	11	2	0	2
4:15 PM	0	0	0	1	0	1	2	16	18	0	0	0
4:30 PM	0	0	0	0	0	0	2	4	6	0	0	0
4:45 PM	0	0	0	0	0	0	3	5	8	1	0	1
5:00 PM	0	0	0	1	0	1	3	9	12	0	0	0
5:15 PM	0	1	1	1	1	2	3	4	7	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	1	2	0	1	1	0	0	0
6:00 PM	6	0	6	0	0	0	0	12	12	0	0	0
6:15 PM	0	0	0	1	0	1	0	0	0	0	1	1

All Traffic Data Services

40 CEDAR ST & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	LEAD AVE Eastbound					LEAD AVE Westbound					CEDAR ST Northbound					CEDAR ST Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	0	0	0	0	4	32	6	0	0	2	31	0	0	0	0	2	6	0	83	577
6:15 AM	0	0	0	0	0	0	3	56	8	0	0	1	44	0	0	0	0	0	8	0	120	688
6:30 AM	0	0	0	0	0	0	2	98	10	0	0	0	65	0	0	0	0	0	18	0	193	779
6:45 AM	0	0	0	0	0	0	3	98	6	0	0	2	61	0	0	0	0	1	10	0	181	916
7:00 AM	0	0	0	0	0	0	5	111	5	0	0	0	52	0	0	0	0	1	20	0	194	1,054
7:15 AM	0	0	0	0	0	0	3	142	13	0	0	0	40	0	0	0	0	3	10	0	211	1,104
7:30 AM	0	0	0	0	0	0	4	203	9	0	0	2	56	0	0	0	0	8	48	0	330	1,138
7:45 AM	0	0	0	0	0	0	4	233	16	0	0	3	32	0	0	0	0	2	29	0	319	1,041
8:00 AM	0	0	0	0	0	0	2	167	8	0	0	2	45	0	0	0	0	1	19	0	244	956
8:15 AM	0	0	0	0	0	0	7	177	6	0	0	2	35	0	0	0	0	3	15	0	245	0
8:30 AM	0	0	0	0	0	0	4	170	8	0	0	8	29	0	0	0	0	1	13	0	233	0
8:45 AM	0	0	0	0	0	0	4	182	8	0	0	2	21	0	0	0	0	7	10	0	234	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights	0	0	0	0	0	0	17	775	39	0	0	8	168	0	0	0	0	13	111	0	1,131
Mediums	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	6
Total	0	0	0	0	0	0	17	780	39	0	0	9	168	0	0	0	0	14	111	0	1,138
Bicycles on Road	0	0	0	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	2	0	11
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.8%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.83					0.87					0.56			0.86
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.84	0.72	0.00	0.00	0.47	0.85	0.00	0.00	0.00	0.00	0.44	0.58	0.00	0.86

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	4	32	6	0	0	2	31	0	0	0	0	2	6	0	83
6:15 AM	0	0	0	0	0	0	3	56	8	0	0	1	44	0	0	0	0	0	8	0	120
6:30 AM	0	0	0	0	0	0	2	96	10	0	0	0	65	0	0	0	0	0	18	0	191
6:45 AM	0	0	0	0	0	0	2	98	6	0	0	2	61	0	0	0	0	1	10	0	180
7:00 AM	0	0	0	0	0	0	5	110	5	0	0	0	52	0	0	0	0	1	20	0	193
7:15 AM	0	0	0	0	0	0	3	140	13	0	0	0	40	0	0	0	0	3	10	0	209
7:30 AM	0	0	0	0	0	0	4	200	9	0	0	1	56	0	0	0	0	7	48	0	325
7:45 AM	0	0	0	0	0	0	4	231	16	0	0	3	32	0	0	0	0	2	29	0	317
8:00 AM	0	0	0	0	0	0	2	167	8	0	0	2	45	0	0	0	0	1	19	0	244
8:15 AM	0	0	0	0	0	0	7	177	6	0	0	2	35	0	0	0	0	3	15	0	245
8:30 AM	0	0	0	0	0	0	4	164	8	0	0	8	29	0	0	0	0	1	13	0	227
8:45 AM	0	0	0	0	0	0	4	179	8	0	0	2	21	0	0	0	0	6	10	0	230
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	4
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	2	0	5
8:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	0	1	1	0	1	1
6:15 AM	0	0	0	0	0	0	0	0	0	2	0	2
6:30 AM	1	0	1	0	0	0	0	0	0	1	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	7	0	7
7:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

40 CEDAR ST & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:15 PM - 01:15 PM
Peak 15-Minutes
01:00 PM - 01:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					CEDAR ST					CEDAR ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	0	0	0	0	4	134	7	0	0	4	10	0	0	0	0	6	19	0	184	814
11:15 AM	0	0	0	0	0	0	4	151	2	0	0	5	9	0	0	0	0	7	11	0	189	893
11:30 AM	0	0	0	0	0	0	5	175	4	0	0	2	11	0	0	0	0	7	10	0	214	941
11:45 AM	0	0	0	0	0	0	7	176	7	0	0	2	13	0	0	0	0	3	19	0	227	956
12:00 PM	0	0	0	0	0	0	6	197	7	0	0	9	11	0	0	0	0	5	28	0	263	971
12:15 PM	0	0	0	0	0	0	9	183	4	0	0	3	8	0	0	0	0	5	25	0	237	982
12:30 PM	0	0	0	0	0	0	6	189	7	0	0	2	10	0	0	0	0	4	11	0	229	965
12:45 PM	0	0	0	0	0	0	8	201	2	0	0	2	9	0	0	0	0	3	17	0	242	951
1:00 PM	0	0	0	0	0	0	10	218	9	0	0	1	11	0	0	0	0	6	19	0	274	933
1:15 PM	0	0	0	0	0	0	14	166	7	0	0	4	5	0	0	0	0	6	18	0	220	0
1:30 PM	0	0	0	0	0	0	2	173	5	0	0	4	7	0	0	0	0	7	17	0	215	0
1:45 PM	0	0	0	0	0	0	18	180	2	0	0	2	8	0	0	0	0	0	14	0	224	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	30	779	22	0	0	8	37	0	0	0	0	17	70	0	963
Mediums	0	0	0	0	0	0	3	12	0	0	0	0	1	0	0	0	0	1	2	0	19
Total	0	0	0	0	0	0	33	791	22	0	0	8	38	0	0	0	0	18	72	0	982
Bicycles on Road	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.89					0.78					0.77			0.90
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.91	0.69	0.00	0.00	0.50	0.85	0.00	0.00	0.00	0.00	0.82	0.74	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	4	130	7	0	0	4	10	0	0	0	0	6	19	0	180
11:15 AM	0	0	0	0	0	0	4	144	2	0	0	5	9	0	0	0	0	7	11	0	182
11:30 AM	0	0	0	0	0	0	4	169	4	0	0	2	11	0	0	0	0	6	10	0	206
11:45 AM	0	0	0	0	0	0	6	171	7	0	0	2	13	0	0	0	0	3	19	0	221
12:00 PM	0	0	0	0	0	0	5	195	7	0	0	9	10	0	0	0	0	5	28	0	259
12:15 PM	0	0	0	0	0	0	8	180	4	0	0	3	8	0	0	0	0	4	25	0	232
12:30 PM	0	0	0	0	0	0	6	186	7	0	0	2	9	0	0	0	0	4	10	0	224
12:45 PM	0	0	0	0	0	0	7	198	2	0	0	2	9	0	0	0	0	3	17	0	238
1:00 PM	0	0	0	0	0	0	9	215	9	0	0	1	11	0	0	0	0	6	18	0	269
1:15 PM	0	0	0	0	0	0	12	164	7	0	0	3	5	0	0	0	0	5	18	0	214
1:30 PM	0	0	0	0	0	0	1	171	5	0	0	4	7	0	0	0	0	7	16	0	211
1:45 PM	0	0	0	0	0	0	17	176	2	0	0	2	8	0	0	0	0	0	14	0	219
Mediums																					
11:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
11:30 AM	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	1	0	0	8
11:45 AM	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
12:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	1	0	0	5
12:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	1	0	5
12:45 PM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	5
1:15 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	0	5
1:30 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	4
1:45 PM	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	2	3	0	0	0	0	0	0	0	2	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:45 AM	3	3	6	0	0	0	0	0	0	0	0	0
12:00 PM	2	0	2	0	0	0	0	0	0	0	0	0
12:15 PM	2	0	2	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	2	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	3	1	4	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	1	0	1	0	1	1	0	0	0	1	2	3

All Traffic Data Services

40 CEDAR ST & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					CEDAR ST					CEDAR ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	0	0	0	0	0	4	216	3	0	0	3	6	0	0	0	0	3	35	0	270	1,247
3:45 PM	0	0	0	0	0	0	5	257	4	0	0	2	3	0	0	0	0	7	27	0	305	1,315
4:00 PM	0	0	0	0	0	0	8	268	4	0	0	4	3	0	0	0	0	5	53	0	345	1,341
4:15 PM	0	0	0	0	0	0	4	268	3	0	0	3	5	0	0	0	0	8	36	0	327	1,372
4:30 PM	0	0	0	0	0	0	3	270	4	0	0	4	4	0	0	0	0	4	49	0	338	1,333
4:45 PM	0	0	0	0	0	0	4	251	7	0	0	0	6	0	0	0	0	7	56	0	331	1,306
5:00 PM	0	0	0	0	0	0	6	290	2	0	0	1	8	0	0	0	0	9	60	0	376	1,267
5:15 PM	0	0	0	0	0	0	6	230	5	0	0	1	7	0	0	0	0	5	34	0	288	1,141
5:30 PM	0	0	0	0	0	0	2	246	9	0	0	3	10	0	0	0	0	10	31	0	311	1,123
5:45 PM	0	0	0	0	0	0	5	234	4	0	0	1	13	0	0	0	0	1	34	0	292	0
6:00 PM	0	0	0	0	0	0	3	207	5	0	0	1	11	0	0	0	0	4	19	0	250	0
6:15 PM	0	0	0	0	0	0	6	212	11	0	0	0	14	0	0	0	0	3	24	0	270	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	17	1,066	16	0	0	8	23	0	0	0	0	28	201	0	1,359
Mediums	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	0	0	0	0	0	0	17	1,079	16	0	0	8	23	0	0	0	0	28	201	0	1,372
Bicycles on Road	0	0	0	0	0	0	0	7	0	0	0	0	2	0	0	0	0	0	2	0	11
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.95					0.83			0.91
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.93	0.66	0.00	0.00	0.81	0.86	0.00	0.00	0.00	0.00	0.78	0.84	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	4	213	3	0	0	3	6	0	0	0	0	3	35	0	267
3:45 PM	0	0	0	0	0	0	2	254	4	0	0	2	3	0	0	0	0	7	27	0	299
4:00 PM	0	0	0	0	0	0	8	264	4	0	0	4	3	0	0	0	0	5	53	0	341
4:15 PM	0	0	0	0	0	0	4	264	3	0	0	3	5	0	0	0	0	8	36	0	323
4:30 PM	0	0	0	0	0	0	3	269	4	0	0	4	4	0	0	0	0	4	49	0	337
4:45 PM	0	0	0	0	0	0	4	246	7	0	0	0	6	0	0	0	0	7	56	0	326
5:00 PM	0	0	0	0	0	0	6	287	2	0	0	1	8	0	0	0	0	9	60	0	373
5:15 PM	0	0	0	0	0	0	6	225	5	0	0	1	7	0	0	0	0	5	34	0	283
5:30 PM	0	0	0	0	0	0	2	243	9	0	0	3	10	0	0	0	0	10	31	0	308
5:45 PM	0	0	0	0	0	0	5	230	4	0	0	1	13	0	0	0	0	1	34	0	288
6:00 PM	0	0	0	0	0	0	3	201	5	0	0	1	11	0	0	0	0	4	19	0	244
6:15 PM	0	0	0	0	0	0	6	209	11	0	0	0	14	0	0	0	0	3	23	0	266
Mediums																					
3:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6
4:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0	4
5:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
6:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	1	0	1	1	0	1	1	0	1
4:00 PM	2	1	3	0	0	0	2	0	2	0	0	0
4:15 PM	0	3	3	0	0	0	0	0	0	0	0	0
4:30 PM	3	0	3	0	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

41 SPRUCE ST & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:00 AM - 08:00 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					SPRUCE ST					SPRUCE ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	10	37	2	0	0	0	0	0	0	0	0	2	1	0	0	3	1	0	0	56	351
6:15 AM	0	12	46	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	60	444
6:30 AM	0	20	79	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	103	560
6:45 AM	0	19	106	0	0	0	0	0	0	0	0	0	1	1	0	0	1	4	0	0	132	647
7:00 AM	0	13	128	1	0	0	0	0	0	0	0	0	0	3	0	0	2	2	0	0	149	694
7:15 AM	0	9	158	2	0	0	0	0	0	0	0	0	0	3	0	0	2	2	0	0	176	688
7:30 AM	0	7	179	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	190	669
7:45 AM	0	9	163	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	179	641
8:00 AM	0	2	138	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	143	648
8:15 AM	0	8	143	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	157	0
8:30 AM	0	7	143	0	0	0	0	0	0	0	0	0	2	5	0	0	3	2	0	0	162	0
8:45 AM	0	4	173	0	0	0	0	0	0	0	0	0	1	5	0	0	1	2	0	0	186	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	38	616	3	0	0	0	0	0	0	0	0	2	6	0	0	7	6	0	0	678
Mediums	0	0	11	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	15
Total	0	38	628	3	0	0	0	0	0	0	0	0	3	7	0	0	7	8	0	0	694
Bicycles on Road	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.1%					0.0%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.90					0.00					0.50					0.80			0.91
Peak Hour Factor (PHF)	0.00	0.80	0.89	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.55	0.00	0.00	0.67	0.69	0.00	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	10	35	2	0	0	0	0	0	0	0	0	1	1	0	0	3	1	0	0	53
6:15 AM	0	12	45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	59
6:30 AM	0	20	78	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	101
6:45 AM	0	19	104	0	0	0	0	0	0	0	0	0	1	1	0	0	1	4	0	0	130
7:00 AM	0	13	125	1	0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	0	145
7:15 AM	0	9	155	2	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	171
7:30 AM	0	7	177	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	188
7:45 AM	0	9	159	0	0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	0	174
8:00 AM	0	2	136	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	141
8:15 AM	0	8	141	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	155
8:30 AM	0	6	140	0	0	0	0	0	0	0	0	0	1	5	0	0	3	2	0	0	157
8:45 AM	0	4	169	0	0	0	0	0	0	0	0	0	1	5	0	0	1	2	0	0	182
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
8:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	0	0	0	1	0	1	0	0	0
6:15 AM	0	0	0	0	1	1	0	0	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	1	0	1	1
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	1	1	0	1	0	1	1	1	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:30 AM	0	0	0	0	0	0	1	1	2	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

41 SPRUCE ST & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
01:00 PM - 01:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					SPRUCE ST					SPRUCE ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	3	142	2	0	0	0	0	0	0	0	0	0	6	0	0	2	0	0	0	155	668
11:15 AM	0	7	163	4	0	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0	180	679
11:30 AM	0	3	157	4	0	0	0	0	0	0	0	0	2	3	0	0	4	0	0	0	173	649
11:45 AM	0	7	143	1	0	0	0	0	0	0	0	0	4	3	0	0	1	1	0	0	160	641
12:00 PM	0	3	150	3	0	0	0	0	0	0	0	0	3	1	0	0	3	3	0	0	166	651
12:15 PM	0	6	138	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	150	692
12:30 PM	0	5	148	1	0	0	0	0	0	0	0	0	2	3	0	0	3	3	0	0	165	735
12:45 PM	0	2	160	3	0	0	0	0	0	0	0	0	2	1	0	0	1	1	0	0	170	725
1:00 PM	0	5	182	6	0	0	0	0	0	0	0	0	5	1	0	0	4	4	0	0	207	720
1:15 PM	0	3	178	3	0	0	0	0	0	0	0	0	1	1	0	0	3	4	0	0	193	0
1:30 PM	0	3	147	1	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	155	0
1:45 PM	0	2	144	5	0	0	0	0	0	0	0	0	5	1	0	0	4	4	0	0	165	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	14	662	13	0	0	0	0	0	0	0	0	10	6	0	0	11	12	0	0	728
Mediums	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	0	15	668	13	0	0	0	0	0	0	0	0	10	6	0	0	11	12	0	0	735
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.90					0.00					0.79					0.81			0.89
Peak Hour Factor (PHF)	0.00	0.75	0.92	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.58	0.00	0.00	0.81	0.81	0.00	0.00	0.89

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	3	138	2	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	150
11:15 AM	0	7	158	4	0	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0	175
11:30 AM	0	3	155	4	0	0	0	0	0	0	0	0	2	3	0	0	4	0	0	0	171
11:45 AM	0	7	142	1	0	0	0	0	0	0	0	0	4	2	0	0	1	1	0	0	158
12:00 PM	0	3	148	3	0	0	0	0	0	0	0	0	3	1	0	0	3	3	0	0	164
12:15 PM	0	6	137	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	149
12:30 PM	0	5	144	1	0	0	0	0	0	0	0	0	2	3	0	0	3	3	0	0	161
12:45 PM	0	2	160	3	0	0	0	0	0	0	0	0	2	1	0	0	1	1	0	0	170
1:00 PM	0	5	181	6	0	0	0	0	0	0	0	0	5	1	0	0	4	4	0	0	206
1:15 PM	0	2	177	3	0	0	0	0	0	0	0	0	1	1	0	0	3	4	0	0	191
1:30 PM	0	3	145	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	152
1:45 PM	0	2	140	5	0	0	0	0	0	0	0	0	5	1	0	0	4	4	0	0	161
Mediums																					
11:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
11:15 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
12:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	1	1	2	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	1	2	0	0	0	1	0	1	0	0	0
11:45 AM	0	0	0	1	1	2	0	0	0	0	0	0
12:00 PM	2	0	2	1	0	1	3	0	3	0	0	0
12:15 PM	1	0	1	0	4	4	5	0	5	0	0	0
12:30 PM	0	0	0	1	0	1	0	1	1	0	0	0
12:45 PM	1	0	1	0	1	1	0	1	1	0	1	1
1:00 PM	0	0	0	1	0	1	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	3	0	3	0	1	1	0	0	0
1:45 PM	0	0	0	0	1	1	0	0	0	0	1	1

All Traffic Data Services

41 SPRUCE ST & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
05:00 PM - 06:00 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					SPRUCE ST					SPRUCE ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	5	161	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	171	812
3:45 PM	0	1	207	3	0	0	0	0	0	0	0	0	2	2	0	0	3	8	0	0	226	838
4:00 PM	0	4	178	1	0	0	0	0	0	0	0	0	4	4	0	0	4	0	0	0	195	778
4:15 PM	0	3	201	0	0	0	0	0	0	0	0	0	2	4	0	0	7	3	0	0	220	842
4:30 PM	0	5	185	3	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	197	873
4:45 PM	0	1	159	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	166	885
5:00 PM	0	4	243	1	0	0	0	0	0	0	0	0	1	2	0	0	6	2	0	0	259	934
5:15 PM	0	1	234	1	0	0	0	0	0	0	0	0	0	1	0	0	8	6	0	0	251	868
5:30 PM	0	1	199	1	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	209	781
5:45 PM	0	4	197	2	0	0	0	0	0	0	0	0	0	4	0	0	3	5	0	0	215	0
6:00 PM	0	6	176	2	0	0	0	0	0	0	0	0	0	2	0	0	3	4	0	0	193	0
6:15 PM	0	4	155	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	164	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	10	867	5	0	0	0	0	0	0	0	0	3	9	0	0	21	13	0	0	928
Mediums	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	10	873	5	0	0	0	0	0	0	0	0	3	9	0	0	21	13	0	0	934
Bicycles on Road	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Bicycles on Crosswalk			0					0					2					0			2
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.90					0.00					0.66					0.61			0.90
Peak Hour Factor (PHF)	0.00	0.63	0.90	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.81	0.00	0.00	0.66	0.63	0.00	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	5	161	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	171
3:45 PM	0	1	205	3	0	0	0	0	0	0	0	0	2	2	0	0	3	7	0	0	223
4:00 PM	0	4	174	1	0	0	0	0	0	0	0	0	4	4	0	0	4	0	0	0	191
4:15 PM	0	3	201	0	0	0	0	0	0	0	0	0	2	4	0	0	7	3	0	0	220
4:30 PM	0	5	182	3	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	194
4:45 PM	0	1	159	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	166
5:00 PM	0	4	240	1	0	0	0	0	0	0	0	0	1	2	0	0	6	2	0	0	256
5:15 PM	0	1	233	1	0	0	0	0	0	0	0	0	0	1	0	0	8	6	0	0	250
5:30 PM	0	1	198	1	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	208
5:45 PM	0	4	196	2	0	0	0	0	0	0	0	0	0	4	0	0	3	5	0	0	214
6:00 PM	0	6	173	2	0	0	0	0	0	0	0	0	0	2	0	0	3	4	0	0	190
6:15 PM	0	4	154	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	163
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
4:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1	1	0	1
5:00 PM	0	0	0	0	0	0	2	0	2	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
3:45 PM	2	0	2	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	2
4:30 PM	1	2	3	0	0	0	1	1	2	1	1	2
4:45 PM	0	0	0	2	0	2	0	0	0	0	0	0
5:00 PM	1	0	1	0	0	0	1	1	2	0	0	0
5:15 PM	0	1	1	0	0	0	0	2	2	0	0	0
5:30 PM	2	0	2	2	0	2	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	1	0	1	1	0	0	0
6:00 PM	0	0	0	0	3	3	0	0	0	0	2	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

42 OAK ST & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					OAK ST					OAK ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	0	19	24	0	0	8	51	0	0	0	0	0	0	0	102	705
6:15 AM	0	0	0	0	0	0	0	34	35	0	0	14	79	0	0	0	0	0	0	0	162	856
6:30 AM	0	0	0	0	0	0	0	35	77	0	0	20	81	0	0	0	0	0	0	0	213	993
6:45 AM	0	0	0	0	0	0	0	50	64	0	0	27	87	0	0	0	0	0	0	0	228	1,208
7:00 AM	0	0	0	0	0	0	0	51	84	0	0	14	104	0	0	0	0	0	0	0	253	1,451
7:15 AM	0	0	0	0	0	0	0	57	100	0	0	25	117	0	0	0	0	0	0	0	299	1,547
7:30 AM	0	0	0	0	0	0	0	99	150	0	0	33	146	0	0	0	0	0	0	0	428	1,607
7:45 AM	0	0	0	0	0	0	0	129	150	0	0	28	164	0	0	0	0	0	0	0	471	1,496
8:00 AM	0	0	0	0	0	0	0	100	95	0	0	13	141	0	0	0	0	0	0	0	349	1,385
8:15 AM	0	0	0	0	0	0	0	106	94	0	0	25	134	0	0	0	0	0	0	0	359	0
8:30 AM	0	0	0	0	0	0	0	89	87	0	0	17	124	0	0	0	0	0	0	0	317	0
8:45 AM	0	0	0	0	0	0	0	97	120	0	0	30	113	0	0	0	0	0	0	0	360	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3
Lights	0	0	0	0	0	0	0	432	485	0	0	96	572	0	0	0	0	0	0	0	1,585
Mediums	0	0	0	0	0	0	0	2	3	0	0	3	11	0	0	0	0	0	0	0	19
Total	0	0	0	0	0	0	0	434	489	0	0	99	585	0	0	0	0	0	0	0	1,607
Bicycles on Road	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.1%					0.3%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.00					0.83					0.89					0.00			0.85
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.83	0.00	0.00	0.76	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	0	0	0	0	0	0	18	24	0	0	8	51	0	0	0	0	0	0	0	101
6:15 AM	0	0	0	0	0	0	0	34	35	0	0	14	77	0	0	0	0	0	0	0	160
6:30 AM	0	0	0	0	0	0	0	34	77	0	0	20	81	0	0	0	0	0	0	0	212
6:45 AM	0	0	0	0	0	0	0	50	64	0	0	26	83	0	0	0	0	0	0	0	223
7:00 AM	0	0	0	0	0	0	0	51	83	0	0	14	100	0	0	0	0	0	0	0	248
7:15 AM	0	0	0	0	0	0	0	56	99	0	0	24	114	0	0	0	0	0	0	0	293
7:30 AM	0	0	0	0	0	0	0	98	149	0	0	32	145	0	0	0	0	0	0	0	424
7:45 AM	0	0	0	0	0	0	0	128	149	0	0	28	160	0	0	0	0	0	0	0	465
8:00 AM	0	0	0	0	0	0	0	100	94	0	0	12	139	0	0	0	0	0	0	0	345
8:15 AM	0	0	0	0	0	0	0	106	93	0	0	24	128	0	0	0	0	0	0	0	351
8:30 AM	0	0	0	0	0	0	0	84	87	0	0	16	122	0	0	0	0	0	0	0	309
8:45 AM	0	0	0	0	0	0	0	96	118	0	0	30	110	0	0	0	0	0	0	0	354
Mediums																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	4	0	0	0	0	0	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	7
8:30 AM	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	0	0	0	0	0	5
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	1	1	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

42 OAK ST & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					OAK ST					OAK ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	0	71	95	0	0	16	112	0	0	0	0	0	0	0	294	1,292
11:15 AM	0	0	0	0	0	0	0	84	94	0	0	17	133	0	0	0	0	0	0	0	328	1,386
11:30 AM	0	0	0	0	0	0	0	91	93	0	0	30	126	0	0	0	0	0	0	0	340	1,393
11:45 AM	0	0	0	0	0	0	0	96	115	0	0	18	101	0	0	0	0	0	0	0	330	1,380
12:00 PM	0	0	0	0	0	0	0	110	131	0	0	21	126	0	0	0	0	0	0	0	388	1,419
12:15 PM	0	0	0	0	0	0	0	100	105	0	0	16	114	0	0	0	0	0	0	0	335	1,417
12:30 PM	0	0	0	0	0	0	0	87	114	0	0	18	108	0	0	0	0	0	0	0	327	1,409
12:45 PM	0	0	0	0	0	0	0	115	104	0	0	16	134	0	0	0	0	0	0	0	369	1,417
1:00 PM	0	0	0	0	0	0	0	113	147	0	0	16	110	0	0	0	0	0	0	0	386	1,385
1:15 PM	0	0	0	0	0	0	0	97	85	0	0	27	118	0	0	0	0	0	0	0	327	0
1:30 PM	0	0	0	0	0	0	0	98	114	0	0	17	106	0	0	0	0	0	0	0	335	0
1:45 PM	0	0	0	0	0	0	0	100	104	0	0	20	113	0	0	0	0	0	0	0	337	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Lights	0	0	0	0	0	0	0	408	445	0	0	69	470	0	0	0	0	0	0	0	1,392
Mediums	0	0	0	0	0	0	0	4	9	0	0	2	10	0	0	0	0	0	0	0	25
Total	0	0	0	0	0	0	0	412	454	0	0	71	482	0	0	0	0	0	0	0	1,419
Bicycles on Road	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.4%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.85					0.92					0.00			0.91
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.80	0.00	0.00	0.72	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Lights																					
11:00 AM	0	0	0	0	0	0	0	69	94	0	0	16	111	0	0	0	0	0	0	0	290
11:15 AM	0	0	0	0	0	0	0	79	92	0	0	17	130	0	0	0	0	0	0	0	318
11:30 AM	0	0	0	0	0	0	0	89	92	0	0	29	123	0	0	0	0	0	0	0	333
11:45 AM	0	0	0	0	0	0	0	92	115	0	0	17	100	0	0	0	0	0	0	0	324
12:00 PM	0	0	0	0	0	0	0	109	130	0	0	21	125	0	0	0	0	0	0	0	385
12:15 PM	0	0	0	0	0	0	0	100	102	0	0	16	110	0	0	0	0	0	0	0	328
12:30 PM	0	0	0	0	0	0	0	87	111	0	0	17	106	0	0	0	0	0	0	0	321
12:45 PM	0	0	0	0	0	0	0	112	102	0	0	15	129	0	0	0	0	0	0	0	358
1:00 PM	0	0	0	0	0	0	0	112	145	0	0	16	108	0	0	0	0	0	0	0	381
1:15 PM	0	0	0	0	0	0	0	96	83	0	0	23	115	0	0	0	0	0	0	0	317
1:30 PM	0	0	0	0	0	0	0	97	109	0	0	17	101	0	0	0	0	0	0	0	324
1:45 PM	0	0	0	0	0	0	0	99	101	0	0	20	113	0	0	0	0	0	0	0	333
Mediums																					
11:00 AM	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	4
11:15 AM	0	0	0	0	0	0	0	5	2	0	0	0	3	0	0	0	0	0	0	0	10
11:30 AM	0	0	0	0	0	0	0	2	1	0	0	1	2	0	0	0	0	0	0	0	6
11:45 AM	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	6
12:30 PM	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	0	0	0	0	6
12:45 PM	0	0	0	0	0	0	0	3	2	0	0	1	5	0	0	0	0	0	0	0	11
1:00 PM	0	0	0	0	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	5
1:15 PM	0	0	0	0	0	0	0	1	2	0	0	4	3	0	0	0	0	0	0	0	10
1:30 PM	0	0	0	0	0	0	0	1	5	0	0	0	4	0	0	0	0	0	0	0	10
1:45 PM	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	1	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	1	1	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	1	1

All Traffic Data Services

42 OAK ST & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					OAK ST					OAK ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	0	149	149	0	0	29	162	0	0	0	0	0	0	0	489	1,986
3:45 PM	0	0	0	0	0	0	0	166	135	0	0	38	165	0	0	0	0	0	0	0	504	1,990
4:00 PM	0	0	0	0	0	0	0	152	188	0	0	18	142	0	0	0	0	0	0	0	500	1,995
4:15 PM	0	0	0	0	0	0	0	172	171	0	0	15	135	0	0	0	0	0	0	0	493	2,039
4:30 PM	0	0	0	0	0	0	0	162	164	0	0	16	151	0	0	0	0	0	0	0	493	1,961
4:45 PM	0	0	0	0	0	0	0	171	168	0	0	23	147	0	0	0	0	0	0	0	509	1,865
5:00 PM	0	0	0	0	0	0	0	201	180	0	0	21	142	0	0	0	0	0	0	0	544	1,755
5:15 PM	0	0	0	0	0	0	0	142	144	0	0	14	115	0	0	0	0	0	0	0	415	1,610
5:30 PM	0	0	0	0	0	0	0	161	131	0	0	22	83	0	0	0	0	0	0	0	397	1,539
5:45 PM	0	0	0	0	0	0	0	143	132	0	0	16	108	0	0	0	0	0	0	0	399	0
6:00 PM	0	0	0	0	0	0	0	157	118	0	0	10	114	0	0	0	0	0	0	0	399	0
6:15 PM	0	0	0	0	0	0	0	127	115	0	0	13	89	0	0	0	0	0	0	0	344	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	0	693	677	0	0	74	571	0	0	0	0	0	0	0	2,015
Mediums	0	0	0	0	0	0	0	13	6	0	0	1	4	0	0	0	0	0	0	0	24
Total	0	0	0	0	0	0	0	706	683	0	0	75	575	0	0	0	0	0	0	0	2,039
Bicycles on Road	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Crosswalk			0					0					2					1			3
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.91					0.87					0.00			0.94
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.92	0.00	0.00	0.66	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	0	149	148	0	0	29	159	0	0	0	0	0	0	0	485
3:45 PM	0	0	0	0	0	0	0	162	134	0	0	38	163	0	0	0	0	0	0	0	497
4:00 PM	0	0	0	0	0	0	0	150	185	0	0	18	140	0	0	0	0	0	0	0	493
4:15 PM	0	0	0	0	0	0	0	165	169	0	0	14	131	0	0	0	0	0	0	0	479
4:30 PM	0	0	0	0	0	0	0	161	164	0	0	16	151	0	0	0	0	0	0	0	492
4:45 PM	0	0	0	0	0	0	0	168	166	0	0	23	147	0	0	0	0	0	0	0	504
5:00 PM	0	0	0	0	0	0	0	199	178	0	0	21	142	0	0	0	0	0	0	0	540
5:15 PM	0	0	0	0	0	0	0	141	140	0	0	14	114	0	0	0	0	0	0	0	409
5:30 PM	0	0	0	0	0	0	0	158	131	0	0	22	83	0	0	0	0	0	0	0	394
5:45 PM	0	0	0	0	0	0	0	141	131	0	0	16	107	0	0	0	0	0	0	0	395
6:00 PM	0	0	0	0	0	0	0	155	114	0	0	10	114	0	0	0	0	0	0	0	393
6:15 PM	0	0	0	0	0	0	0	124	114	0	0	13	89	0	0	0	0	0	0	0	340
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	4
3:45 PM	0	0	0	0	0	0	0	4	1	0	0	0	2	0	0	0	0	0	0	0	7
4:00 PM	0	0	0	0	0	0	0	2	3	0	0	0	2	0	0	0	0	0	0	0	7
4:15 PM	0	0	0	0	0	0	0	7	2	0	0	1	4	0	0	0	0	0	0	0	14
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	1	4	0	0	0	1	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	1	0	1	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

43 OAK ST & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					OAK ST					OAK ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	26	74	0	0	0	0	0	0	0	0	0	36	20	0	0	0	0	0	0	156	1,014
6:15 AM	0	43	109	0	0	0	0	0	0	0	0	0	48	29	0	0	0	0	0	0	229	1,203
6:30 AM	0	48	150	0	0	0	0	0	0	0	0	0	53	37	0	0	0	0	0	0	288	1,368
6:45 AM	0	53	184	0	0	0	0	0	0	0	0	0	60	44	0	0	0	0	0	0	341	1,537
7:00 AM	0	64	188	0	0	0	0	0	0	0	0	0	55	38	0	0	0	0	0	0	345	1,633
7:15 AM	0	75	227	0	0	0	0	0	0	0	0	0	59	33	0	0	0	0	0	0	394	1,659
7:30 AM	0	108	247	0	0	0	0	0	0	0	0	0	70	32	0	0	0	0	0	0	457	1,656
7:45 AM	0	123	217	0	0	0	0	0	0	0	0	0	74	23	0	0	0	0	0	0	437	1,535
8:00 AM	0	85	196	0	0	0	0	0	0	0	0	0	73	17	0	0	0	0	0	0	371	1,454
8:15 AM	0	91	196	0	0	0	0	0	0	0	0	0	66	38	0	0	0	0	0	0	391	0
8:30 AM	0	88	170	0	0	0	0	0	0	0	0	0	54	24	0	0	0	0	0	0	336	0
8:45 AM	0	75	195	0	0	0	0	0	0	0	0	0	63	23	0	0	0	0	0	0	356	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	2	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
Lights	0	386	881	0	0	0	0	0	0	0	0	0	268	100	0	0	0	0	0	0	1,635
Mediums	0	3	5	0	0	0	0	0	0	0	0	0	6	5	0	0	0	0	0	0	19
Total	0	391	887	0	0	0	0	0	0	0	0	0	276	105	0	0	0	0	0	0	1,659
Bicycles on Road	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.2%					0.0%					0.5%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.90					0.00					0.94					0.00			0.91
Peak Hour Factor (PHF)	0.00	0.83	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	26	72	0	0	0	0	0	0	0	0	0	36	20	0	0	0	0	0	0	154
6:15 AM	0	41	108	0	0	0	0	0	0	0	0	0	48	29	0	0	0	0	0	0	226
6:30 AM	0	48	150	0	0	0	0	0	0	0	0	0	53	37	0	0	0	0	0	0	288
6:45 AM	0	50	183	0	0	0	0	0	0	0	0	0	57	43	0	0	0	0	0	0	333
7:00 AM	0	61	185	0	0	0	0	0	0	0	0	0	55	37	0	0	0	0	0	0	338
7:15 AM	0	74	226	0	0	0	0	0	0	0	0	0	56	31	0	0	0	0	0	0	387
7:30 AM	0	105	245	0	0	0	0	0	0	0	0	0	70	31	0	0	0	0	0	0	451
7:45 AM	0	122	215	0	0	0	0	0	0	0	0	0	72	22	0	0	0	0	0	0	431
8:00 AM	0	85	195	0	0	0	0	0	0	0	0	0	70	16	0	0	0	0	0	0	366
8:15 AM	0	90	193	0	0	0	0	0	0	0	0	0	60	38	0	0	0	0	0	0	381
8:30 AM	0	88	166	0	0	0	0	0	0	0	0	0	51	24	0	0	0	0	0	0	329
8:45 AM	0	72	192	0	0	0	0	0	0	0	0	0	63	23	0	0	0	0	0	0	350
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	3	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	7
7:00 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
7:30 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
7:45 AM	0	1	2	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	6
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4
8:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	10
8:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
8:45 AM	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

43 OAK ST & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
01:00 PM - 01:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					OAK ST					OAK ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	82	146	0	0	0	0	0	0	0	0	0	47	14	0	0	0	0	0	0	289	1,248
11:15 AM	0	86	170	0	0	0	0	0	0	0	0	0	62	23	0	0	0	0	0	0	341	1,275
11:30 AM	0	74	149	0	0	0	0	0	0	0	0	0	77	18	0	0	0	0	0	0	318	1,236
11:45 AM	0	71	156	0	0	0	0	0	0	0	0	0	53	20	0	0	0	0	0	0	300	1,227
12:00 PM	0	81	155	0	0	0	0	0	0	0	0	0	61	19	0	0	0	0	0	0	316	1,268
12:15 PM	0	78	159	0	0	0	0	0	0	0	0	0	57	8	0	0	0	0	0	0	302	1,305
12:30 PM	0	70	156	0	0	0	0	0	0	0	0	0	62	21	0	0	0	0	0	0	309	1,346
12:45 PM	0	86	190	0	0	0	0	0	0	0	0	0	51	14	0	0	0	0	0	0	341	1,335
1:00 PM	0	75	194	0	0	0	0	0	0	0	0	0	59	25	0	0	0	0	0	0	353	1,306
1:15 PM	0	79	183	0	0	0	0	0	0	0	0	0	60	21	0	0	0	0	0	0	343	0
1:30 PM	0	75	149	0	0	0	0	0	0	0	0	0	51	23	0	0	0	0	0	0	298	0
1:45 PM	0	84	163	0	0	0	0	0	0	0	0	0	48	17	0	0	0	0	0	0	312	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Lights	0	304	714	0	0	0	0	0	0	0	0	0	220	79	0	0	0	0	0	0	1,317
Mediums	0	6	9	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	28
Total	0	310	723	0	0	0	0	0	0	0	0	0	232	81	0	0	0	0	0	0	1,346
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.3%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.94					0.00					0.88					0.00			0.95
Peak Hour Factor (PHF)	0.00	0.92	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	81	140	0	0	0	0	0	0	0	0	0	47	13	0	0	0	0	0	0	281
11:15 AM	0	85	166	0	0	0	0	0	0	0	0	0	60	23	0	0	0	0	0	0	334
11:30 AM	0	74	146	0	0	0	0	0	0	0	0	0	73	18	0	0	0	0	0	0	311
11:45 AM	0	70	154	0	0	0	0	0	0	0	0	0	52	20	0	0	0	0	0	0	296
12:00 PM	0	81	151	0	0	0	0	0	0	0	0	0	60	19	0	0	0	0	0	0	311
12:15 PM	0	75	157	0	0	0	0	0	0	0	0	0	56	8	0	0	0	0	0	0	296
12:30 PM	0	69	152	0	0	0	0	0	0	0	0	0	59	21	0	0	0	0	0	0	301
12:45 PM	0	84	189	0	0	0	0	0	0	0	0	0	48	14	0	0	0	0	0	0	335
1:00 PM	0	74	192	0	0	0	0	0	0	0	0	0	57	24	0	0	0	0	0	0	347
1:15 PM	0	77	181	0	0	0	0	0	0	0	0	0	56	20	0	0	0	0	0	0	334
1:30 PM	0	71	146	0	0	0	0	0	0	0	0	0	50	22	0	0	0	0	0	0	289
1:45 PM	0	84	157	0	0	0	0	0	0	0	0	0	48	17	0	0	0	0	0	0	306
Mediums																					
11:00 AM	0	1	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	8
11:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6
11:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6
11:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
12:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15 PM	0	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
12:30 PM	0	1	4	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	8
12:45 PM	0	2	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6
1:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	6
1:15 PM	0	2	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	8
1:30 PM	0	4	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	8
1:45 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:15 PM	0	0	0	1	0	1	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	1	0	0	0

All Traffic Data Services

43 OAK ST & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE Eastbound					COAL AVE Westbound					OAK ST Northbound					OAK ST Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	102	158	0	0	0	0	0	0	0	0	0	97	16	0	0	0	0	0	0	373	1,470
3:45 PM	0	93	190	0	0	0	0	0	0	0	0	0	99	23	0	0	0	0	0	0	405	1,463
4:00 PM	0	90	156	0	0	0	0	0	0	0	0	0	73	20	0	0	0	0	0	0	339	1,402
4:15 PM	0	92	183	0	0	0	0	0	0	0	0	0	65	13	0	0	0	0	0	0	353	1,477
4:30 PM	0	106	176	0	0	0	0	0	0	0	0	0	67	17	0	0	0	0	0	0	366	1,501
4:45 PM	0	93	167	0	0	0	0	0	0	0	0	0	66	18	0	0	0	0	0	0	344	1,442
5:00 PM	0	108	230	0	0	0	0	0	0	0	0	0	60	16	0	0	0	0	0	0	414	1,440
5:15 PM	0	94	228	0	0	0	0	0	0	0	0	0	33	22	0	0	0	0	0	0	377	1,360
5:30 PM	0	67	171	0	0	0	0	0	0	0	0	0	44	25	0	0	0	0	0	0	307	1,246
5:45 PM	0	85	202	0	0	0	0	0	0	0	0	0	38	17	0	0	0	0	0	0	342	0
6:00 PM	0	96	190	0	0	0	0	0	0	0	0	0	34	14	0	0	0	0	0	0	334	0
6:15 PM	0	69	143	0	0	0	0	0	0	0	0	0	32	19	0	0	0	0	0	0	263	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	400	793	0	0	0	0	0	0	0	0	0	226	72	0	0	0	0	0	0	1,491
Mediums	0	1	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	10
Total	0	401	801	0	0	0	0	0	0	0	0	0	226	73	0	0	0	0	0	0	1,501
Bicycles on Road	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.89					0.00					0.83					0.00			0.91
Peak Hour Factor (PHF)	0.00	0.93	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	101	157	0	0	0	0	0	0	0	0	0	95	16	0	0	0	0	0	0	369
3:45 PM	0	92	188	0	0	0	0	0	0	0	0	0	98	23	0	0	0	0	0	0	401
4:00 PM	0	90	153	0	0	0	0	0	0	0	0	0	71	20	0	0	0	0	0	0	334
4:15 PM	0	91	182	0	0	0	0	0	0	0	0	0	62	13	0	0	0	0	0	0	348
4:30 PM	0	106	172	0	0	0	0	0	0	0	0	0	67	17	0	0	0	0	0	0	362
4:45 PM	0	93	167	0	0	0	0	0	0	0	0	0	66	18	0	0	0	0	0	0	344
5:00 PM	0	108	228	0	0	0	0	0	0	0	0	0	60	16	0	0	0	0	0	0	412
5:15 PM	0	93	226	0	0	0	0	0	0	0	0	0	33	21	0	0	0	0	0	0	373
5:30 PM	0	67	169	0	0	0	0	0	0	0	0	0	44	25	0	0	0	0	0	0	305
5:45 PM	0	85	201	0	0	0	0	0	0	0	0	0	37	17	0	0	0	0	0	0	340
6:00 PM	0	96	188	0	0	0	0	0	0	0	0	0	34	13	0	0	0	0	0	0	331
6:15 PM	0	69	142	0	0	0	0	0	0	0	0	0	32	19	0	0	0	0	0	0	262
Mediums																					
3:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
3:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
4:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
4:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5
4:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

44 LOCUST ST & LEAD AVE AM
Thursday, June 6, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE Eastbound					LEAD AVE Westbound					LOCUST ST Northbound					LOCUST ST Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	0	0	0	0	7	29	0	0	0	0	0	0	0	0	0	42	28	0	106	771
6:15 AM	0	0	0	0	0	0	8	46	0	0	0	0	0	0	0	0	0	76	49	0	179	906
6:30 AM	0	0	0	0	0	0	12	41	0	0	0	0	0	0	0	0	0	117	49	0	219	1,061
6:45 AM	0	0	0	0	0	0	13	54	0	0	0	0	0	0	0	0	0	141	59	0	267	1,214
7:00 AM	0	0	0	0	0	0	10	45	0	0	0	0	0	0	0	0	0	123	63	0	241	1,366
7:15 AM	0	0	0	0	0	0	13	65	0	0	0	0	0	0	0	0	0	157	99	0	334	1,464
7:30 AM	0	0	0	0	0	0	27	93	0	0	0	0	0	0	0	0	0	136	116	0	372	1,466
7:45 AM	0	0	0	0	0	0	18	112	0	0	0	0	0	0	0	0	0	178	111	0	419	1,479
8:00 AM	0	0	0	0	0	0	12	112	0	0	0	0	0	0	0	0	0	122	93	0	339	1,441
8:15 AM	0	0	0	0	0	0	13	123	0	0	0	0	0	0	0	0	0	105	95	0	336	0
8:30 AM	0	0	0	0	0	0	14	107	0	0	0	0	0	0	0	0	0	141	123	0	385	0
8:45 AM	0	0	0	0	0	0	10	106	0	0	0	0	0	0	0	0	0	137	128	0	381	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	0	0	0	0	56	444	0	0	0	0	0	0	0	0	0	543	418	0	1,461
Mediums	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	3	4	0	17
Total	0	0	0	0	0	0	57	454	0	0	0	0	0	0	0	0	0	546	422	0	1,479
Bicycles on Road	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.2%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.94					0.00					0.88			0.88
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.86	0.00	0.88

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	6	28	0	0	0	0	0	0	0	0	0	42	28	0	104
6:15 AM	0	0	0	0	0	0	7	46	0	0	0	0	0	0	0	0	0	75	49	0	177
6:30 AM	0	0	0	0	0	0	12	41	0	0	0	0	0	0	0	0	0	117	49	0	219
6:45 AM	0	0	0	0	0	0	13	53	0	0	0	0	0	0	0	0	0	138	58	0	262
7:00 AM	0	0	0	0	0	0	10	45	0	0	0	0	0	0	0	0	0	120	63	0	238
7:15 AM	0	0	0	0	0	0	13	63	0	0	0	0	0	0	0	0	0	157	98	0	331
7:30 AM	0	0	0	0	0	0	27	93	0	0	0	0	0	0	0	0	0	135	114	0	369
7:45 AM	0	0	0	0	0	0	18	109	0	0	0	0	0	0	0	0	0	177	111	0	415
8:00 AM	0	0	0	0	0	0	12	111	0	0	0	0	0	0	0	0	0	122	93	0	338
8:15 AM	0	0	0	0	0	0	13	120	0	0	0	0	0	0	0	0	0	103	92	0	328
8:30 AM	0	0	0	0	0	0	13	104	0	0	0	0	0	0	0	0	0	141	122	0	380
8:45 AM	0	0	0	0	0	0	8	104	0	0	0	0	0	0	0	0	0	135	125	0	372
Mediums																					
6:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	4
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	4
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	3	0	7
8:30 AM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	0	5
8:45 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	3	0	9
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	2

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

44 LOCUST ST & LEAD AVE Noon
Thursday, June 6, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					LOCUST ST					LOCUST ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	0	0	0	19	89	0	0	0	0	0	0	0	0	0	86	67	0	261	1,108
11:15 AM	0	0	0	0	0	0	11	89	0	0	0	0	0	0	0	0	0	104	66	0	270	1,136
11:30 AM	0	0	0	0	0	0	16	102	0	0	0	0	0	0	0	0	0	82	76	0	276	1,161
11:45 AM	0	0	0	0	0	0	24	109	0	0	0	0	0	0	0	0	0	84	84	0	301	1,202
12:00 PM	0	0	0	0	0	0	25	98	0	0	0	0	0	0	0	0	0	94	72	0	289	1,250
12:15 PM	0	0	0	0	0	0	15	113	0	0	0	0	0	0	0	0	0	92	75	0	295	1,246
12:30 PM	0	0	0	0	0	0	25	119	0	0	0	0	0	0	0	0	0	101	72	0	317	1,227
12:45 PM	0	0	0	0	0	0	25	124	0	0	0	0	0	0	0	0	0	98	102	0	349	1,209
1:00 PM	0	0	0	0	0	0	18	99	0	0	0	0	0	0	0	0	0	108	60	0	285	1,138
1:15 PM	0	0	0	0	0	0	19	96	0	0	0	0	0	0	0	0	0	87	74	0	276	0
1:30 PM	0	0	0	0	0	0	21	108	0	0	0	0	0	0	0	0	0	92	78	0	299	0
1:45 PM	0	0	0	0	0	0	17	107	0	0	0	0	0	0	0	0	0	68	86	0	278	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	89	451	0	0	0	0	0	0	0	0	0	378	317	0	1,235
Mediums	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	7	4	0	15
Total	0	0	0	0	0	0	90	454	0	0	0	0	0	0	0	0	0	385	321	0	1,250
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.91					0.00					0.89			0.90
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.79	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	19	87	0	0	0	0	0	0	0	0	0	86	66	0	258
11:15 AM	0	0	0	0	0	0	11	89	0	0	0	0	0	0	0	0	0	102	63	0	265
11:30 AM	0	0	0	0	0	0	16	100	0	0	0	0	0	0	0	0	0	79	75	0	270
11:45 AM	0	0	0	0	0	0	23	107	0	0	0	0	0	0	0	0	0	81	81	0	292
12:00 PM	0	0	0	0	0	0	25	98	0	0	0	0	0	0	0	0	0	93	72	0	288
12:15 PM	0	0	0	0	0	0	15	112	0	0	0	0	0	0	0	0	0	91	74	0	292
12:30 PM	0	0	0	0	0	0	25	119	0	0	0	0	0	0	0	0	0	97	71	0	312
12:45 PM	0	0	0	0	0	0	24	122	0	0	0	0	0	0	0	0	0	97	100	0	343
1:00 PM	0	0	0	0	0	0	17	93	0	0	0	0	0	0	0	0	0	108	58	0	276
1:15 PM	0	0	0	0	0	0	19	95	0	0	0	0	0	0	0	0	0	86	74	0	274
1:30 PM	0	0	0	0	0	0	21	107	0	0	0	0	0	0	0	0	0	90	74	0	292
1:45 PM	0	0	0	0	0	0	17	106	0	0	0	0	0	0	0	0	0	68	85	0	276
Mediums																					
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	1	0	5
11:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	2	0	7
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5
12:45 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	2	0	6
1:00 PM	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	2	0	9
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	4	0	7
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1	1	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

44 LOCUST ST & LEAD AVE PM
Thursday, June 6, 2024

Peak Hour
04:45 PM - 05:45 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					LOCUST ST					LOCUST ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	0	0	0	42	135	0	0	0	0	0	0	0	0	0	85	100	0	362	1,444
3:45 PM	0	0	0	0	0	0	37	125	0	0	0	0	0	0	0	0	0	91	103	0	356	1,446
4:00 PM	0	0	0	0	0	0	45	144	0	0	0	0	0	0	0	0	0	81	98	0	368	1,466
4:15 PM	0	0	0	0	0	0	25	154	0	0	0	0	0	0	0	0	0	78	101	0	358	1,539
4:30 PM	0	0	0	0	0	0	47	145	0	0	0	0	0	0	0	0	0	80	92	0	364	1,591
4:45 PM	0	0	0	0	0	0	42	162	0	0	0	0	0	0	0	0	0	87	85	0	376	1,621
5:00 PM	0	0	0	0	0	0	45	183	0	0	0	0	0	0	0	0	0	105	108	0	441	1,562
5:15 PM	0	0	0	0	0	0	41	152	0	0	0	0	0	0	0	0	0	103	114	0	410	1,418
5:30 PM	0	0	0	0	0	0	34	166	0	0	0	0	0	0	0	0	0	88	106	0	394	1,285
5:45 PM	0	0	0	0	0	0	23	122	0	0	0	0	0	0	0	0	0	79	93	0	317	0
6:00 PM	0	0	0	0	0	0	30	116	0	0	0	0	0	0	0	0	0	68	83	0	297	0
6:15 PM	0	0	0	0	0	0	24	105	0	0	0	0	0	0	0	0	0	76	72	0	277	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	0	0	0	0	159	659	0	0	0	0	0	0	0	0	0	383	411	0	1,612
Mediums	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	2	0	8
Total	0	0	0	0	0	0	162	663	0	0	0	0	0	0	0	0	0	383	413	0	1,621
Bicycles on Road	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.0%					0.1%					0.0%					0.0%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.90					0.00					0.92			0.92
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.92	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	41	135	0	0	0	0	0	0	0	0	0	84	100	0	360
3:45 PM	0	0	0	0	0	0	36	123	0	0	0	0	0	0	0	0	0	90	103	0	352
4:00 PM	0	0	0	0	0	0	44	142	0	0	0	0	0	0	0	0	0	80	96	0	362
4:15 PM	0	0	0	0	0	0	25	152	0	0	0	0	0	0	0	0	0	77	101	0	355
4:30 PM	0	0	0	0	0	0	46	144	0	0	0	0	0	0	0	0	0	79	89	0	358
4:45 PM	0	0	0	0	0	0	41	160	0	0	0	0	0	0	0	0	0	87	84	0	372
5:00 PM	0	0	0	0	0	0	44	182	0	0	0	0	0	0	0	0	0	105	108	0	439
5:15 PM	0	0	0	0	0	0	40	151	0	0	0	0	0	0	0	0	0	103	113	0	407
5:30 PM	0	0	0	0	0	0	34	166	0	0	0	0	0	0	0	0	0	88	106	0	394
5:45 PM	0	0	0	0	0	0	23	121	0	0	0	0	0	0	0	0	0	79	93	0	316
6:00 PM	0	0	0	0	0	0	29	113	0	0	0	0	0	0	0	0	0	68	83	0	293
6:15 PM	0	0	0	0	0	0	24	104	0	0	0	0	0	0	0	0	0	76	71	0	275
Mediums																					
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	4
4:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	2	0	6
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	3	0	6
4:45 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	4
5:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	2	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

45 LOCUST ST & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:15 AM - 08:15 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					LOCUST ST					LOCUST ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	43	6	0	0	0	0	0	0	0	0	0	0	0	0	59	5	0	0	113	752
6:15 AM	0	0	59	12	0	0	0	0	0	0	0	0	0	0	0	0	93	11	0	0	175	912
6:30 AM	0	0	71	8	0	0	0	0	0	0	0	0	0	0	0	0	124	14	0	0	217	1,069
6:45 AM	0	0	102	3	0	0	0	0	0	0	0	0	0	0	0	0	133	9	0	0	247	1,247
7:00 AM	0	0	108	8	0	0	0	0	0	0	0	0	0	0	0	0	150	7	0	0	273	1,383
7:15 AM	0	0	129	12	0	0	0	0	0	0	0	0	0	0	0	0	175	16	0	0	332	1,431
7:30 AM	0	0	193	10	0	0	0	0	0	0	0	0	0	0	0	0	159	33	0	0	395	1,414
7:45 AM	0	0	201	21	0	0	0	0	0	0	0	0	0	0	0	0	136	25	0	0	383	1,308
8:00 AM	0	0	155	13	0	0	0	0	0	0	0	0	0	0	0	0	135	18	0	0	321	1,233
8:15 AM	0	0	162	15	0	0	0	0	0	0	0	0	0	0	0	0	126	12	0	0	315	0
8:30 AM	0	0	150	8	0	0	0	0	0	0	0	0	0	0	0	0	112	19	0	0	289	0
8:45 AM	0	0	139	13	0	0	0	0	0	0	0	0	0	0	0	0	136	20	0	0	308	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
Lights	0	0	672	55	0	0	0	0	0	0	0	0	0	0	0	0	600	90	0	0	1,417
Mediums	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	11
Total	0	0	678	56	0	0	0	0	0	0	0	0	0	0	0	0	605	92	0	0	1,431
Bicycles on Road	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.4%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.87					0.00					0.00					0.91			0.91
Peak Hour Factor (PHF)	0.00	0.00	0.88	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.70	0.00	0.00	0.91

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	42	6	0	0	0	0	0	0	0	0	0	0	0	0	57	4	0	0	109
6:15 AM	0	0	57	12	0	0	0	0	0	0	0	0	0	0	0	0	93	11	0	0	173
6:30 AM	0	0	71	8	0	0	0	0	0	0	0	0	0	0	0	0	124	14	0	0	217
6:45 AM	0	0	99	3	0	0	0	0	0	0	0	0	0	0	0	0	132	9	0	0	243
7:00 AM	0	0	102	8	0	0	0	0	0	0	0	0	0	0	0	0	150	7	0	0	267
7:15 AM	0	0	129	12	0	0	0	0	0	0	0	0	0	0	0	0	173	16	0	0	330
7:30 AM	0	0	189	10	0	0	0	0	0	0	0	0	0	0	0	0	158	33	0	0	390
7:45 AM	0	0	200	21	0	0	0	0	0	0	0	0	0	0	0	0	134	24	0	0	379
8:00 AM	0	0	154	12	0	0	0	0	0	0	0	0	0	0	0	0	135	17	0	0	318
8:15 AM	0	0	160	14	0	0	0	0	0	0	0	0	0	0	0	0	124	12	0	0	310
8:30 AM	0	0	148	7	0	0	0	0	0	0	0	0	0	0	0	0	110	17	0	0	282
8:45 AM	0	0	135	13	0	0	0	0	0	0	0	0	0	0	0	0	134	20	0	0	302
Mediums																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
7:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4
8:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4
8:30 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5
8:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	1	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

45 LOCUST ST & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
01:00 PM - 01:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					LOCUST ST					LOCUST ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	147	20	0	0	0	0	0	0	0	0	0	0	0	0	86	20	0	0	273	1,056
11:15 AM	0	0	169	15	0	0	0	0	0	0	0	0	0	0	0	0	85	10	0	0	279	1,063
11:30 AM	0	0	133	5	0	0	0	0	0	0	0	0	0	0	0	0	90	20	0	0	248	1,062
11:45 AM	0	0	142	13	0	0	0	0	0	0	0	0	0	0	0	0	85	16	0	0	256	1,083
12:00 PM	0	0	143	19	0	0	0	0	0	0	0	0	0	0	0	0	90	28	0	0	280	1,130
12:15 PM	0	0	144	15	0	0	0	0	0	0	0	0	0	0	0	0	94	25	0	0	278	1,160
12:30 PM	0	0	150	17	0	0	0	0	0	0	0	0	0	0	0	0	87	15	0	0	269	1,187
12:45 PM	0	0	146	15	0	0	0	0	0	0	0	0	0	0	0	0	121	21	0	0	303	1,170
1:00 PM	0	0	157	25	0	0	0	0	0	0	0	0	0	0	0	0	113	15	0	0	310	1,135
1:15 PM	0	0	153	15	0	0	0	0	0	0	0	0	0	0	0	0	111	26	0	0	305	0
1:30 PM	0	0	146	16	0	0	0	0	0	0	0	0	0	0	0	0	75	15	0	0	252	0
1:45 PM	0	0	141	8	0	0	0	0	0	0	0	0	0	0	0	0	104	15	0	0	268	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	591	69	0	0	0	0	0	0	0	0	0	0	0	0	428	77	0	0	1,165
Mediums	0	0	15	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	22
Total	0	0	606	72	0	0	0	0	0	0	0	0	0	0	0	0	432	77	0	0	1,187
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.93					0.00					0.00					0.90			0.96
Peak Hour Factor (PHF)	0.00	0.00	0.96	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.79	0.00	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	144	17	0	0	0	0	0	0	0	0	0	0	0	0	85	19	0	0	265
11:15 AM	0	0	165	15	0	0	0	0	0	0	0	0	0	0	0	0	84	10	0	0	274
11:30 AM	0	0	130	5	0	0	0	0	0	0	0	0	0	0	0	0	90	19	0	0	244
11:45 AM	0	0	140	13	0	0	0	0	0	0	0	0	0	0	0	0	84	16	0	0	253
12:00 PM	0	0	140	19	0	0	0	0	0	0	0	0	0	0	0	0	89	27	0	0	275
12:15 PM	0	0	141	14	0	0	0	0	0	0	0	0	0	0	0	0	92	25	0	0	272
12:30 PM	0	0	145	16	0	0	0	0	0	0	0	0	0	0	0	0	86	15	0	0	262
12:45 PM	0	0	144	15	0	0	0	0	0	0	0	0	0	0	0	0	120	21	0	0	300
1:00 PM	0	0	155	23	0	0	0	0	0	0	0	0	0	0	0	0	112	15	0	0	305
1:15 PM	0	0	147	15	0	0	0	0	0	0	0	0	0	0	0	0	110	26	0	0	298
1:30 PM	0	0	141	16	0	0	0	0	0	0	0	0	0	0	0	0	75	15	0	0	247
1:45 PM	0	0	139	7	0	0	0	0	0	0	0	0	0	0	0	0	99	14	0	0	259
Mediums																					
11:00 AM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	8
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
11:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
11:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5
12:15 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5
12:30 PM	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7
12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
1:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
1:15 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7
1:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:45 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	9
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	1	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	1	1	2	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	2	0	2	0	0	0	2	0	2	0	0	0
12:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:15 PM	0	2	2	0	1	1	0	3	3	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	1	0	0	0

All Traffic Data Services

45 LOCUST ST & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					LOCUST ST					LOCUST ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	186	20	0	0	0	0	0	0	0	0	0	0	0	0	70	41	0	0	317	1,278
3:45 PM	0	0	176	13	0	0	0	0	0	0	0	0	0	0	0	0	106	33	0	0	328	1,323
4:00 PM	0	0	183	22	0	0	0	0	0	0	0	0	0	0	0	0	71	41	0	0	317	1,320
4:15 PM	0	0	180	11	0	0	0	0	0	0	0	0	0	0	0	0	92	33	0	0	316	1,429
4:30 PM	0	0	201	23	0	0	0	0	0	0	0	0	0	0	0	0	89	49	0	0	362	1,480
4:45 PM	0	0	173	23	0	0	0	0	0	0	0	0	0	0	0	0	88	41	0	0	325	1,416
5:00 PM	0	0	233	33	0	0	0	0	0	0	0	0	0	0	0	0	102	58	0	0	426	1,405
5:15 PM	0	0	200	16	0	0	0	0	0	0	0	0	0	0	0	0	122	29	0	0	367	1,308
5:30 PM	0	0	153	19	0	0	0	0	0	0	0	0	0	0	0	0	91	35	0	0	298	1,199
5:45 PM	0	0	165	10	0	0	0	0	0	0	0	0	0	0	0	0	112	27	0	0	314	0
6:00 PM	0	0	182	8	0	0	0	0	0	0	0	0	0	0	0	0	112	27	0	0	329	0
6:15 PM	0	0	121	15	0	0	0	0	0	0	0	0	0	0	0	0	97	25	0	0	258	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	802	93	0	0	0	0	0	0	0	0	0	0	0	0	396	175	0	0	1,466
Mediums	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	14
Total	0	0	807	95	0	0	0	0	0	0	0	0	0	0	0	0	401	177	0	0	1,480
Bicycles on Road	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Bicycles on Crosswalk			0					0					0					1			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.85					0.00					0.00					0.90			0.87
Peak Hour Factor (PHF)	0.00	0.00	0.87	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.78	0.00	0.00	0.87

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	186	20	0	0	0	0	0	0	0	0	0	0	0	0	68	41	0	0	315
3:45 PM	0	0	175	13	0	0	0	0	0	0	0	0	0	0	0	0	104	32	0	0	324
4:00 PM	0	0	181	22	0	0	0	0	0	0	0	0	0	0	0	0	70	40	0	0	313
4:15 PM	0	0	178	11	0	0	0	0	0	0	0	0	0	0	0	0	92	33	0	0	314
4:30 PM	0	0	199	22	0	0	0	0	0	0	0	0	0	0	0	0	87	48	0	0	356
4:45 PM	0	0	173	22	0	0	0	0	0	0	0	0	0	0	0	0	88	40	0	0	323
5:00 PM	0	0	231	33	0	0	0	0	0	0	0	0	0	0	0	0	101	58	0	0	423
5:15 PM	0	0	199	16	0	0	0	0	0	0	0	0	0	0	0	0	120	29	0	0	364
5:30 PM	0	0	152	19	0	0	0	0	0	0	0	0	0	0	0	0	90	35	0	0	296
5:45 PM	0	0	164	10	0	0	0	0	0	0	0	0	0	0	0	0	112	27	0	0	313
6:00 PM	0	0	181	8	0	0	0	0	0	0	0	0	0	0	0	0	112	26	0	0	327
6:15 PM	0	0	120	15	0	0	0	0	0	0	0	0	0	0	0	0	97	25	0	0	257
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4
4:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	6
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

46 WALTER ST & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	1	42	0	0	0	0	1	0	0	0	0	0	0	0	44	343
6:15 AM	0	0	0	0	0	0	1	64	0	0	0	0	0	0	0	0	0	0	0	0	65	419
6:30 AM	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	85	512
6:45 AM	0	0	0	0	0	0	0	144	1	0	0	1	2	0	0	0	0	1	0	0	149	619
7:00 AM	0	0	0	0	0	0	2	112	5	0	0	0	0	0	0	0	0	1	0	0	120	745
7:15 AM	0	0	0	0	0	0	5	147	1	0	0	1	0	0	0	0	0	4	0	0	158	850
7:30 AM	0	0	0	0	0	0	2	186	1	0	0	3	0	0	0	0	0	0	0	0	192	928
7:45 AM	0	0	0	0	0	0	7	259	3	0	0	3	3	0	0	0	0	0	0	0	275	956
8:00 AM	0	0	0	0	0	0	9	206	1	0	0	3	1	0	0	0	0	1	4	0	225	900
8:15 AM	0	0	0	0	0	0	3	225	1	0	0	4	1	0	0	0	0	2	0	0	236	0
8:30 AM	0	0	0	0	0	0	5	207	5	0	0	1	2	0	0	0	0	0	0	0	220	0
8:45 AM	0	0	0	0	0	0	3	207	6	0	0	0	1	0	0	0	0	1	1	0	219	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	0	0	0	0	0	0	23	886	10	0	0	11	7	0	0	0	0	2	4	0	943
Mediums	0	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	0	1	0	0	10
Total	0	0	0	0	0	0	24	897	10	0	0	11	7	0	0	0	0	3	4	0	956
Bicycles on Road	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.3%					0.0%					0.0%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			0.00					0.87					0.75					0.45			0.87
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.87	0.54	0.00	0.00	0.81	0.58	0.00	0.00	0.00	0.00	0.38	0.31	0.00	0.87

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	0	0	0	0	1	40	0	0	0	0	1	0	0	0	0	0	0	0	42
6:15 AM	0	0	0	0	0	0	1	64	0	0	0	0	0	0	0	0	0	0	0	0	65
6:30 AM	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	84
6:45 AM	0	0	0	0	0	0	0	142	1	0	0	1	2	0	0	0	0	1	0	0	147
7:00 AM	0	0	0	0	0	0	2	111	5	0	0	0	0	0	0	0	0	1	0	0	119
7:15 AM	0	0	0	0	0	0	5	144	1	0	0	1	0	0	0	0	0	4	0	0	155
7:30 AM	0	0	0	0	0	0	1	183	1	0	0	3	0	0	0	0	0	0	0	0	188
7:45 AM	0	0	0	0	0	0	6	253	3	0	0	3	3	0	0	0	0	0	0	0	268
8:00 AM	0	0	0	0	0	0	9	205	1	0	0	3	1	0	0	0	0	1	4	0	224
8:15 AM	0	0	0	0	0	0	3	224	1	0	0	4	1	0	0	0	0	1	0	0	234
8:30 AM	0	0	0	0	0	0	5	204	5	0	0	1	2	0	0	0	0	0	0	0	217
8:45 AM	0	0	0	0	0	0	3	205	6	0	0	0	1	0	0	0	0	1	1	0	217
Mediums																					
6:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:00 AM	0	1	1	1	1	2	0	0	0	0	0	0
7:15 AM	1	0	1	0	3	3	1	1	2	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	1	0	1	1	0	0	0	0	1	1
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	2	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

46 WALTER ST & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
12:30 PM - 01:30 PM
Peak 15-Minutes
01:00 PM - 01:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	0	0	0	0	2	130	7	0	0	1	2	0	0	0	0	1	1	0	144	646
11:15 AM	0	0	0	0	0	0	1	137	4	0	0	0	1	0	0	0	0	5	1	0	149	681
11:30 AM	0	0	0	0	0	0	3	155	6	0	0	0	4	0	0	0	0	1	0	0	169	697
11:45 AM	0	0	0	0	0	0	2	158	14	0	0	2	2	0	0	0	0	4	2	0	184	694
12:00 PM	0	0	0	0	0	0	3	167	6	0	0	0	1	0	0	0	0	1	1	0	179	703
12:15 PM	0	0	0	0	0	0	3	144	9	0	0	2	4	0	0	0	0	3	0	0	165	721
12:30 PM	0	0	0	0	0	0	3	155	3	0	0	0	0	0	0	0	0	1	4	0	166	747
12:45 PM	0	0	0	0	0	0	7	171	11	0	0	2	2	0	0	0	0	0	0	0	193	739
1:00 PM	0	0	0	0	0	0	3	181	7	0	0	0	1	0	0	0	0	2	3	0	197	727
1:15 PM	0	0	0	0	0	0	7	174	3	0	0	1	0	0	0	0	0	3	3	0	191	0
1:30 PM	0	0	0	0	0	0	4	145	3	0	0	2	3	0	0	0	0	0	1	0	158	0
1:45 PM	0	0	0	0	0	0	3	169	6	0	0	0	2	0	0	0	0	1	0	0	181	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	20	664	24	0	0	3	3	0	0	0	0	5	10	0	729
Mediums	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	1	0	0	18
Total	0	0	0	0	0	0	20	681	24	0	0	3	3	0	0	0	0	6	10	0	747
Bicycles on Road	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.95					0.63					0.67			0.95
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.94	0.63	0.00	0.00	0.63	0.69	0.00	0.00	0.00	0.00	0.55	0.63	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	0	0	0	2	126	7	0	0	1	2	0	0	0	0	1	1	0	140
11:15 AM	0	0	0	0	0	0	1	133	4	0	0	0	1	0	0	0	0	4	1	0	144
11:30 AM	0	0	0	0	0	0	3	149	6	0	0	0	4	0	0	0	0	1	0	0	163
11:45 AM	0	0	0	0	0	0	2	151	14	0	0	2	2	0	0	0	0	3	2	0	176
12:00 PM	0	0	0	0	0	0	3	167	6	0	0	0	1	0	0	0	0	1	1	0	179
12:15 PM	0	0	0	0	0	0	3	143	9	0	0	2	4	0	0	0	0	3	0	0	164
12:30 PM	0	0	0	0	0	0	3	153	3	0	0	0	0	0	0	0	0	1	4	0	164
12:45 PM	0	0	0	0	0	0	7	167	11	0	0	2	2	0	0	0	0	0	0	0	189
1:00 PM	0	0	0	0	0	0	3	176	7	0	0	0	1	0	0	0	0	2	3	0	192
1:15 PM	0	0	0	0	0	0	7	168	3	0	0	1	0	0	0	0	0	2	3	0	184
1:30 PM	0	0	0	0	0	0	4	145	3	0	0	2	3	0	0	0	0	0	1	0	158
1:45 PM	0	0	0	0	0	0	3	165	6	0	0	0	2	0	0	0	0	1	0	0	177
Mediums																					
11:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	5
11:30 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
11:45 AM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	8
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
1:15 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	7
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	1

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	2	0	2	0	0	0	0	0	0
11:15 AM	1	0	1	0	1	1	0	0	0	0	1	1
11:30 AM	0	2	2	1	0	1	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
12:00 PM	1	0	1	2	0	2	0	0	0	0	0	0
12:15 PM	0	1	1	0	0	0	0	0	0	1	1	2
12:30 PM	0	0	0	0	2	2	0	0	0	0	1	1
12:45 PM	0	0	0	2	0	2	0	0	0	2	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

46 WALTER ST & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	0	0	0	0	0	4	207	2	0	0	0	2	0	0	0	0	3	0	0	218	952
3:45 PM	0	0	0	0	0	0	6	237	1	0	0	0	1	0	0	0	0	1	0	0	246	959
4:00 PM	0	0	0	0	0	0	5	205	7	0	0	1	0	0	0	0	0	3	1	0	222	953
4:15 PM	0	0	0	0	0	0	9	252	3	0	0	1	1	0	0	0	0	0	0	0	266	1,005
4:30 PM	0	0	0	0	0	0	1	216	3	0	0	0	2	0	0	0	0	1	2	0	225	982
4:45 PM	0	0	0	0	0	0	9	225	5	0	0	0	0	0	0	0	0	1	0	0	240	1,003
5:00 PM	0	0	0	0	0	0	6	258	2	0	0	0	2	0	0	0	0	4	2	0	274	993
5:15 PM	0	0	0	0	0	0	7	226	5	0	0	3	2	0	0	0	0	0	0	0	243	906
5:30 PM	0	0	0	0	0	0	6	238	0	0	0	0	1	0	0	0	0	1	0	0	246	832
5:45 PM	0	0	0	0	0	0	9	212	5	0	0	0	2	0	0	0	0	2	0	0	230	0
6:00 PM	0	0	0	0	0	0	2	184	1	0	0	0	0	0	0	0	0	0	0	0	187	0
6:15 PM	0	0	0	0	0	0	2	163	2	0	0	1	1	0	0	0	0	0	0	0	169	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	24	941	13	0	0	1	5	0	0	0	0	6	4	0	994
Mediums	0	0	0	0	0	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	11
Total	0	0	0	0	0	0	25	951	13	0	0	1	5	0	0	0	0	6	4	0	1,005
Bicycles on Road	0	0	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	9
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.00					0.93					0.50					0.42			0.92
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.92	0.64	0.00	0.00	0.25	0.88	0.00	0.00	0.00	0.00	0.44	0.50	0.00	0.92

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	4	202	2	0	0	0	2	0	0	0	0	3	0	0	213
3:45 PM	0	0	0	0	0	0	6	235	1	0	0	0	1	0	0	0	0	1	0	0	244
4:00 PM	0	0	0	0	0	0	5	201	7	0	0	1	0	0	0	0	0	3	1	0	218
4:15 PM	0	0	0	0	0	0	8	247	3	0	0	1	1	0	0	0	0	0	0	0	260
4:30 PM	0	0	0	0	0	0	1	214	3	0	0	0	2	0	0	0	0	1	2	0	223
4:45 PM	0	0	0	0	0	0	9	223	5	0	0	0	0	0	0	0	0	1	0	0	238
5:00 PM	0	0	0	0	0	0	6	257	2	0	0	0	2	0	0	0	0	4	2	0	273
5:15 PM	0	0	0	0	0	0	7	226	5	0	0	3	2	0	0	0	0	0	0	0	243
5:30 PM	0	0	0	0	0	0	6	236	0	0	0	0	1	0	0	0	0	1	0	0	244
5:45 PM	0	0	0	0	0	0	9	210	5	0	0	0	2	0	0	0	0	2	0	0	228
6:00 PM	0	0	0	0	0	0	2	183	1	0	0	0	0	0	0	0	0	0	0	0	186
6:15 PM	0	0	0	0	0	0	2	162	2	0	0	1	1	0	0	0	0	0	0	0	168
Mediums																					
3:30 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	4
6:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	1	2	3	0	0	0	1	0	1
4:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	1	1	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	1	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	0	0	0	0	2	2
6:15 PM	1	2	3	0	1	1	0	0	0	0	0	0

All Traffic Data Services

47 WALTER ST & COAL AVE AM
Tuesday, June 4, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	60	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	63	318
6:15 AM	0	0	71	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	76	383
6:30 AM	0	1	72	0	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	78	442
6:45 AM	0	1	95	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	101	510
7:00 AM	0	0	127	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	128	607
7:15 AM	0	0	127	0	0	0	0	0	0	0	0	0	1	4	0	0	2	1	0	0	135	639
7:30 AM	0	0	135	0	0	0	0	0	0	0	0	0	1	9	0	0	1	0	0	0	146	662
7:45 AM	0	1	185	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	198	651
8:00 AM	0	0	148	1	0	0	0	0	0	0	0	0	4	5	0	0	1	1	0	0	160	603
8:15 AM	0	2	144	3	0	0	0	0	0	0	0	0	1	5	0	0	2	1	0	0	158	0
8:30 AM	0	1	120	0	0	0	0	0	0	0	0	0	3	6	0	0	2	3	0	0	135	0
8:45 AM	0	0	140	1	0	0	0	0	0	0	0	0	2	5	0	0	1	1	0	0	150	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	3	599	3	0	0	0	0	0	0	0	0	6	24	0	0	3	8	0	0	646
Mediums	0	0	12	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	15
Total	0	3	612	4	0	0	0	0	0	0	0	0	6	25	0	0	4	8	0	0	662
Bicycles on Road	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	8
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.2%					0.0%					0.0%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.83					0.00					0.78					0.67			0.84
Peak Hour Factor (PHF)	0.00	0.50	0.83	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.69	0.00	0.00	0.75	0.46	0.00	0.00	0.84

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	60	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	63
6:15 AM	0	0	66	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	70
6:30 AM	0	1	72	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	77
6:45 AM	0	1	91	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	97
7:00 AM	0	0	126	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	127
7:15 AM	0	0	127	0	0	0	0	0	0	0	0	0	1	4	0	0	2	1	0	0	135
7:30 AM	0	0	133	0	0	0	0	0	0	0	0	0	1	9	0	0	1	0	0	0	144
7:45 AM	0	1	179	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	192
8:00 AM	0	0	143	1	0	0	0	0	0	0	0	0	4	5	0	0	1	1	0	0	155
8:15 AM	0	2	144	2	0	0	0	0	0	0	0	0	1	4	0	0	1	1	0	0	155
8:30 AM	0	1	117	0	0	0	0	0	0	0	0	0	3	6	0	0	2	3	0	0	132
8:45 AM	0	0	136	1	0	0	0	0	0	0	0	0	2	5	0	0	1	1	0	0	146
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3
8:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Bicycles on Road																					
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	1	1	0	0	0	0	1	1	0	0	0
7:00 AM	0	1	1	0	1	1	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	0	0	0	1	1	2
7:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	2	0	2	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	4	4	0	3	3	0	0	0	0	0	0

All Traffic Data Services

47 WALTER ST & COAL AVE Noon
Tuesday, June 4, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	115	1	0	0	0	0	0	0	0	0	1	5	0	0	4	4	0	0	130	597
11:15 AM	0	0	143	1	0	0	0	0	0	0	0	0	1	1	0	0	3	6	0	0	155	626
11:30 AM	0	2	143	0	0	0	0	0	0	0	0	0	1	0	0	0	3	2	0	0	151	633
11:45 AM	0	0	154	0	0	0	0	0	0	0	0	0	1	1	0	0	3	2	0	0	161	651
12:00 PM	0	0	145	0	0	0	0	0	0	0	0	0	2	5	0	0	0	7	0	0	159	655
12:15 PM	0	1	151	1	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	162	630
12:30 PM	0	2	149	1	0	0	0	0	0	0	0	0	3	8	0	0	3	3	0	0	169	589
12:45 PM	0	2	151	1	0	0	0	0	0	0	0	0	3	4	0	0	4	0	0	0	165	569
1:00 PM	0	2	123	0	0	0	0	0	0	0	0	0	1	3	0	0	1	4	0	0	134	556
1:15 PM	0	0	114	1	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	121	0
1:30 PM	0	0	134	2	0	0	0	0	0	0	0	0	1	7	0	0	3	2	0	0	149	0
1:45 PM	0	0	140	3	0	0	0	0	0	0	0	0	2	4	0	0	1	2	0	0	152	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	5	586	3	0	0	0	0	0	0	0	0	8	23	0	0	7	13	0	0	645
Mediums	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	0	5	596	3	0	0	0	0	0	0	0	0	8	23	0	0	7	13	0	0	655
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.98					0.00					0.70					0.75			0.97
Peak Hour Factor (PHF)	0.00	0.88	0.97	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.72	0.00	0.00	0.81	0.61	0.00	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	111	1	0	0	0	0	0	0	0	0	1	5	0	0	4	4	0	0	126
11:15 AM	0	0	141	0	0	0	0	0	0	0	0	0	1	1	0	0	2	5	0	0	150
11:30 AM	0	2	141	0	0	0	0	0	0	0	0	0	1	0	0	0	3	2	0	0	149
11:45 AM	0	0	150	0	0	0	0	0	0	0	0	0	1	1	0	0	3	2	0	0	157
12:00 PM	0	0	142	0	0	0	0	0	0	0	0	0	2	5	0	0	0	7	0	0	156
12:15 PM	0	1	147	1	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	158
12:30 PM	0	2	148	1	0	0	0	0	0	0	0	0	3	8	0	0	3	3	0	0	168
12:45 PM	0	2	149	1	0	0	0	0	0	0	0	0	3	4	0	0	4	0	0	0	163
1:00 PM	0	2	120	0	0	0	0	0	0	0	0	0	1	3	0	0	1	4	0	0	131
1:15 PM	0	0	112	1	0	0	0	0	0	0	0	0	0	1	0	0	2	2	0	0	118
1:30 PM	0	0	134	2	0	0	0	0	0	0	0	0	0	7	0	0	3	2	0	0	148
1:45 PM	0	0	136	3	0	0	0	0	0	0	0	0	2	3	0	0	0	2	0	0	146
Mediums																					
11:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	6
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	1	0	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
12:15 PM	0	0	0	3	0	3	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	4	1	5	0	0	0	0	0	0
1:30 PM	1	0	1	0	0	0	0	0	0	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

47 WALTER ST & COAL AVE PM
Tuesday, June 4, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					WALTER ST					WALTER ST						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	1	159	1	0	0	0	0	0	0	0	0	2	3	0	0	1	6	0	0	173	738
3:45 PM	0	0	137	1	0	0	0	0	0	0	0	0	2	11	0	0	1	12	0	0	164	787
4:00 PM	0	1	211	1	0	0	0	0	0	0	0	0	1	5	0	0	2	4	0	0	225	799
4:15 PM	0	1	160	0	0	0	0	0	0	0	0	0	2	4	0	0	4	5	0	0	176	841
4:30 PM	0	1	202	0	0	0	0	0	0	0	0	0	2	6	0	0	1	10	0	0	222	897
4:45 PM	0	0	164	2	0	0	0	0	0	0	0	0	1	2	0	0	1	6	0	0	176	854
5:00 PM	0	0	249	1	0	0	0	0	0	0	0	0	3	6	0	0	2	6	0	0	267	837
5:15 PM	0	2	219	1	0	0	0	0	0	0	0	0	1	0	0	0	0	9	0	0	232	761
5:30 PM	0	0	168	0	0	0	0	0	0	0	0	0	1	6	0	0	0	4	0	0	179	666
5:45 PM	0	0	143	2	0	0	0	0	0	0	0	0	2	4	0	0	3	5	0	0	159	0
6:00 PM	0	1	168	2	0	0	0	0	0	0	0	0	4	4	0	0	3	9	0	0	191	0
6:15 PM	0	1	127	1	0	0	0	0	0	0	0	0	0	4	0	0	1	3	0	0	137	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	3	829	4	0	0	0	0	0	0	0	0	7	14	0	0	4	31	0	0	892
Mediums	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	3	834	4	0	0	0	0	0	0	0	0	7	14	0	0	4	31	0	0	897
Bicycles on Road	0	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	13
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.84					0.00					0.63					0.75			0.84
Peak Hour Factor (PHF)	0.00	0.38	0.84	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.59	0.00	0.00	0.50	0.65	0.00	0.00	0.84

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	1	157	1	0	0	0	0	0	0	0	0	2	3	0	0	1	6	0	0	171
3:45 PM	0	0	133	1	0	0	0	0	0	0	0	0	2	11	0	0	1	11	0	0	159
4:00 PM	0	1	207	1	0	0	0	0	0	0	0	0	1	5	0	0	1	4	0	0	220
4:15 PM	0	1	159	0	0	0	0	0	0	0	0	0	2	4	0	0	4	5	0	0	175
4:30 PM	0	1	201	0	0	0	0	0	0	0	0	0	2	6	0	0	1	10	0	0	221
4:45 PM	0	0	163	2	0	0	0	0	0	0	0	0	1	2	0	0	1	6	0	0	175
5:00 PM	0	0	247	1	0	0	0	0	0	0	0	0	3	6	0	0	2	6	0	0	265
5:15 PM	0	2	218	1	0	0	0	0	0	0	0	0	1	0	0	0	0	9	0	0	231
5:30 PM	0	0	168	0	0	0	0	0	0	0	0	0	1	6	0	0	0	4	0	0	179
5:45 PM	0	0	143	2	0	0	0	0	0	0	0	0	2	4	0	0	3	5	0	0	159
6:00 PM	0	1	167	2	0	0	0	0	0	0	0	0	4	4	0	0	3	9	0	0	190
6:15 PM	0	1	127	1	0	0	0	0	0	0	0	0	0	4	0	0	1	3	0	0	137
Mediums																					
3:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
4:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	1	1	0	1	0	0	0	0	0	0
5:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:45 PM	1	2	3	0	0	0	0	0	0	0	0	0
6:00 PM	2	0	2	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	1

All Traffic Data Services

48 BROADWAY BLVD & LEAD AVE AM
Thursday, May 30, 2024

Peak Hour
07:45 AM - 08:45 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LEAD AVE					LEAD AVE					BROADWAY BLVD					BROADWAY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	0	0	0	0	2	30	2	0	0	4	48	0	0	0	0	21	4	0	111	734
6:15 AM	0	0	0	0	0	0	5	42	9	0	0	7	52	0	0	0	0	35	3	0	153	919
6:30 AM	0	0	0	0	0	0	5	58	14	0	0	7	72	0	0	0	0	52	8	0	216	1,094
6:45 AM	0	0	0	0	0	0	8	89	25	0	2	7	58	0	0	0	0	54	11	0	254	1,285
7:00 AM	0	0	0	0	0	0	4	106	20	0	0	9	85	0	0	0	0	61	11	0	296	1,523
7:15 AM	0	0	0	0	0	0	5	113	17	0	1	7	107	0	0	0	0	65	13	0	328	1,711
7:30 AM	0	0	0	0	0	0	11	143	33	0	0	9	120	0	0	0	0	79	12	0	407	1,853
7:45 AM	0	0	0	0	0	0	8	217	29	0	1	20	118	0	0	0	0	74	25	0	492	1,885
8:00 AM	0	0	0	0	0	0	12	169	37	0	1	21	139	0	0	0	0	84	21	0	484	1,811
8:15 AM	0	0	0	0	0	0	9	194	22	0	0	15	117	0	0	0	0	92	21	0	470	0
8:30 AM	0	0	0	0	0	0	4	177	25	0	0	13	109	0	0	0	0	97	14	0	439	0
8:45 AM	0	0	0	0	0	0	14	181	16	0	2	11	82	0	0	0	0	84	28	0	418	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	4	0	0	9
Lights	0	0	0	0	0	0	30	746	112	0	2	68	458	0	0	0	0	325	80	0	1,821
Mediums	0	0	0	0	0	0	3	7	1	0	0	1	24	0	0	0	0	18	1	0	55
Total	0	0	0	0	0	0	33	757	113	0	2	69	483	0	0	0	0	347	81	0	1,885
Bicycles on Road	0	0	0	0	0	0	0	6	1	0	0	0	1	0	0	0	0	0	2	0	10
Bicycles on Crosswalk			0					1					0					0			1
Heavy Vehicle Percentage			0.0%					0.4%					0.2%					0.9%			0.5%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.5%
Peak Hour Factor (PHF)			0.00					0.89					0.87					0.98			0.96
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.87	0.82	0.00	0.38	0.82	0.89	0.00	0.00	0.00	0.00	0.92	0.75	0.00	0.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	4
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Lights																					
6:00 AM	0	0	0	0	0	0	2	29	2	0	0	2	47	0	0	0	0	18	4	0	104
6:15 AM	0	0	0	0	0	0	5	42	9	0	0	6	50	0	0	0	0	35	3	0	150
6:30 AM	0	0	0	0	0	0	5	58	14	0	0	6	71	0	0	0	0	50	8	0	212
6:45 AM	0	0	0	0	0	0	7	88	25	0	2	6	55	0	0	0	0	51	10	0	244
7:00 AM	0	0	0	0	0	0	4	105	20	0	0	9	78	0	0	0	0	53	10	0	279
7:15 AM	0	0	0	0	0	0	5	111	17	0	1	7	104	0	0	0	0	62	13	0	320
7:30 AM	0	0	0	0	0	0	11	142	33	0	0	8	113	0	0	0	0	74	12	0	393
7:45 AM	0	0	0	0	0	0	7	211	28	0	1	20	113	0	0	0	0	71	25	0	476
8:00 AM	0	0	0	0	0	0	12	167	37	0	1	21	132	0	0	0	0	81	21	0	472
8:15 AM	0	0	0	0	0	0	8	192	22	0	0	14	109	0	0	0	0	85	21	0	451
8:30 AM	0	0	0	0	0	0	3	176	25	0	0	13	104	0	0	0	0	88	13	0	422
8:45 AM	0	0	0	0	0	0	14	177	16	0	2	9	82	0	0	0	0	73	26	0	399
Mediums																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	2	0	0	6
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	4
6:45 AM	0	0	0	0	0	0	1	1	0	0	0	1	3	0	0	0	0	3	1	0	10
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	7	0	0	0	0	8	1	0	17
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	2	0	0	7
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	6	0	0	0	0	5	0	0	13
7:45 AM	0	0	0	0	0	0	1	3	1	0	0	0	5	0	0	0	0	2	0	0	12
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	3	0	0	10
8:15 AM	0	0	0	0	0	0	1	2	0	0	0	1	8	0	0	0	0	5	0	0	17
8:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	5	0	0	0	0	8	1	0	16
8:45 AM	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	11	1	0	18
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	4
8:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	2	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
6:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	3	3	0	0	0	0	0	0	0	0	0
7:45 AM	2	2	4	1	0	1	0	0	0	0	0	0
8:00 AM	0	1	1	0	0	0	0	0	0	2	0	2
8:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:30 AM	1	2	3	0	1	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

48 BROADWAY BLVD & LEAD AVE Noon
Thursday, May 30, 2024

Peak Hour
01:00 PM - 02:00 PM
Peak 15-Minutes
01:45 PM - 02:00 PM

Traffic Counts - All Vehicles

	LEAD AVE Eastbound					LEAD AVE Westbound					BROADWAY BLVD Northbound					BROADWAY BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	0	0	0	0	0	10	111	14	0	0	11	92	0	0	0	0	117	13	0	368	1,520
11:15 AM	0	0	0	0	0	0	14	98	16	0	0	10	102	0	0	0	0	116	16	0	372	1,532
11:30 AM	0	0	0	0	0	0	15	112	27	0	1	8	85	0	0	0	0	112	22	0	382	1,523
11:45 AM	0	0	0	0	0	0	19	119	19	0	1	18	97	0	0	0	0	112	13	0	398	1,518
12:00 PM	0	0	0	0	0	0	21	110	22	0	1	17	79	0	0	0	0	114	16	0	380	1,486
12:15 PM	0	0	0	0	0	0	16	98	33	0	1	15	94	0	0	0	0	89	17	0	363	1,506
12:30 PM	0	0	0	0	0	0	17	130	23	0	0	15	89	0	0	0	0	81	22	0	377	1,538
12:45 PM	0	0	0	0	0	0	21	116	16	0	0	19	102	0	0	0	0	70	22	0	366	1,529
1:00 PM	0	0	0	0	0	0	12	138	30	0	1	13	79	0	0	0	0	105	22	0	400	1,581
1:15 PM	0	0	0	0	0	0	12	137	21	0	2	12	97	0	0	0	0	96	18	0	395	0
1:30 PM	0	0	0	0	0	0	15	106	16	0	0	13	81	0	0	0	0	116	21	0	368	0
1:45 PM	0	0	0	0	0	0	14	128	27	0	0	11	108	0	0	0	0	107	23	0	418	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	7
Lights	0	0	0	0	0	0	52	499	91	0	3	48	351	0	0	0	0	401	80	0	1,525
Mediums	0	0	0	0	0	0	1	10	3	0	0	1	11	0	0	0	0	19	4	0	49
Total	0	0	0	0	0	0	53	509	94	0	3	49	365	0	0	0	0	424	84	0	1,581
Bicycles on Road	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	2	0	6
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.7%					0.8%			0.4%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.4%
Peak Hour Factor (PHF)			0.00					0.93					0.89					0.97			0.95
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.94	0.77	0.00	1.00	0.87	0.92	0.00	0.00	0.00	0.00	0.98	0.91	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Lights																					
11:00 AM	0	0	0	0	0	0	10	109	14	0	0	10	86	0	0	0	0	107	13	0	349
11:15 AM	0	0	0	0	0	0	14	93	15	0	0	10	93	0	0	0	0	104	16	0	345
11:30 AM	0	0	0	0	0	0	15	107	26	0	1	7	76	0	0	0	0	102	22	0	356
11:45 AM	0	0	0	0	0	0	19	114	18	0	1	18	93	0	0	0	0	102	13	0	378
12:00 PM	0	0	0	0	0	0	21	110	22	0	1	15	78	0	0	0	0	104	16	0	367
12:15 PM	0	0	0	0	0	0	16	98	32	0	1	13	91	0	0	0	0	84	17	0	352
12:30 PM	0	0	0	0	0	0	17	129	22	0	0	15	81	0	0	0	0	75	22	0	361
12:45 PM	0	0	0	0	0	0	20	112	16	0	0	19	93	0	0	0	0	63	22	0	345
1:00 PM	0	0	0	0	0	0	12	134	30	0	1	13	74	0	0	0	0	100	22	0	386
1:15 PM	0	0	0	0	0	0	12	133	19	0	2	11	94	0	0	0	0	91	18	0	380
1:30 PM	0	0	0	0	0	0	15	106	16	0	0	13	78	0	0	0	0	108	19	0	355
1:45 PM	0	0	0	0	0	0	13	126	26	0	0	11	105	0	0	0	0	102	21	0	404
Mediums																					
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	1	6	0	0	0	0	9	0	0	18
11:15 AM	0	0	0	0	0	0	0	5	1	0	0	0	9	0	0	0	0	9	0	0	24
11:30 AM	0	0	0	0	0	0	0	5	1	0	0	1	9	0	0	0	0	8	0	0	24
11:45 AM	0	0	0	0	0	0	0	5	1	0	0	0	3	0	0	0	0	8	0	0	17
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	9	0	0	10
12:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	0	0	5	0	0	10
12:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	6	0	0	0	0	4	0	0	12
12:45 PM	0	0	0	0	0	0	1	4	0	0	0	0	9	0	0	0	0	6	0	0	20
1:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	3	0	0	0	0	4	0	0	11
1:15 PM	0	0	0	0	0	0	0	4	2	0	0	1	3	0	0	0	0	5	0	0	15
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	7	2	0	11
1:45 PM	0	0	0	0	0	0	1	2	1	0	0	0	3	0	0	0	0	3	2	0	12
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
1:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	2	2	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	1	0	1	0	0	0
12:00 PM	1	1	2	0	0	0	0	0	0	0	1	1
12:15 PM	2	0	2	0	0	0	1	0	1	0	0	0
12:30 PM	0	1	1	0	0	0	1	0	1	0	0	0
12:45 PM	0	1	1	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	1	2	0	0	0	0	0	0	2	0	2
1:30 PM	1	0	1	0	0	0	1	0	1	1	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

48 BROADWAY BLVD & LEAD AVE PM
Thursday, May 30, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	LEAD AVE Eastbound					LEAD AVE Westbound					BROADWAY BLVD Northbound					BROADWAY BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	0	0	0	0	0	13	146	20	0	1	16	117	0	0	0	0	118	18	0	449	2,041
3:45 PM	0	0	0	0	0	0	21	182	25	0	1	32	121	0	0	0	0	115	20	0	517	2,115
4:00 PM	0	0	0	0	0	0	14	151	26	0	0	42	129	0	0	0	0	140	32	0	534	2,112
4:15 PM	0	0	0	0	0	0	25	189	29	0	0	16	118	0	0	0	0	136	28	0	541	2,182
4:30 PM	0	0	0	0	0	0	20	181	16	0	0	31	113	0	0	0	0	131	31	0	523	2,111
4:45 PM	0	0	0	0	0	0	14	184	17	0	0	19	107	0	0	0	0	131	42	0	514	2,094
5:00 PM	0	0	0	0	0	0	19	200	22	0	1	27	123	0	0	0	0	166	46	0	604	2,059
5:15 PM	0	0	0	0	0	0	17	209	12	0	0	27	77	0	0	0	0	103	25	0	470	1,847
5:30 PM	0	0	0	0	0	0	16	179	22	0	1	31	95	0	0	0	0	121	41	0	506	1,690
5:45 PM	0	0	0	0	0	0	16	185	20	0	3	16	83	0	0	0	0	129	27	0	479	0
6:00 PM	0	0	0	0	0	0	9	147	13	0	1	17	81	0	0	0	0	103	21	0	392	0
6:15 PM	0	0	0	0	0	0	19	141	12	0	0	8	63	0	0	0	0	64	6	0	313	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Lights	0	0	0	0	0	0	77	745	83	0	1	91	452	0	0	0	0	550	146	0	2,145
Mediums	0	0	0	0	0	0	1	9	1	0	0	2	8	0	0	0	0	13	1	0	35
Total	0	0	0	0	0	0	78	754	84	0	1	93	461	0	0	0	0	564	147	0	2,182
Bicycles on Road	0	0	0	0	0	0	0	11	0	0	0	0	2	0	0	0	0	0	1	0	14
Bicycles on Crosswalk			0					2					0					0			2
Heavy Vehicle Percentage			0.0%					0.0%					0.2%					0.1%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.00					0.95					0.88					0.84			0.90
Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.93	0.86	0.00	0.42	0.72	0.94	0.00	0.00	0.00	0.00	0.85	0.84	0.00	0.90

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	0	0	0	13	142	20	0	1	16	109	0	0	0	0	113	18	0	432
3:45 PM	0	0	0	0	0	0	21	178	25	0	1	31	114	0	0	0	0	112	20	0	502
4:00 PM	0	0	0	0	0	0	13	150	25	0	0	41	126	0	0	0	0	137	29	0	521
4:15 PM	0	0	0	0	0	0	24	184	29	0	0	15	115	0	0	0	0	131	28	0	526
4:30 PM	0	0	0	0	0	0	20	180	16	0	0	30	112	0	0	0	0	131	31	0	520
4:45 PM	0	0	0	0	0	0	14	182	16	0	0	19	105	0	0	0	0	126	42	0	504
5:00 PM	0	0	0	0	0	0	19	199	22	0	1	27	120	0	0	0	0	162	45	0	595
5:15 PM	0	0	0	0	0	0	17	209	12	0	0	26	77	0	0	0	0	103	25	0	469
5:30 PM	0	0	0	0	0	0	16	177	21	0	1	31	92	0	0	0	0	120	40	0	498
5:45 PM	0	0	0	0	0	0	16	184	20	0	3	16	82	0	0	0	0	126	27	0	474
6:00 PM	0	0	0	0	0	0	9	146	13	0	1	16	81	0	0	0	0	100	21	0	387
6:15 PM	0	0	0	0	0	0	19	139	12	0	0	8	61	0	0	0	0	63	6	0	308
Mediums																					
3:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	8	0	0	0	0	4	0	0	16
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	1	7	0	0	0	0	3	0	0	15
4:00 PM	0	0	0	0	0	0	1	1	0	0	0	1	3	0	0	0	0	2	3	0	11
4:15 PM	0	0	0	0	0	0	1	5	0	0	0	1	3	0	0	0	0	5	0	0	15
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	2	1	0	0	0	2	0	0	0	0	4	0	0	9
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	4	1	0	8
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	2	1	0	0	0	2	0	0	0	0	1	1	0	7
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	5
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3	0	0	5
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	5
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	6
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	1	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:00 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
6:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	2	0	2	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:30 PM	2	0	2	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	0	1	0	1	1	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	2
4:30 PM	0	1	1	0	0	0	0	0	0	0	5	5
4:45 PM	0	0	0	0	1	1	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	1	1	2	0	0	0	0	0	0	1	0	1
5:30 PM	0	2	2	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	1	2	0	0	0	0	0	0	0	0	0
6:15 PM	0	1	1	0	0	0	0	0	0	0	0	0

All Traffic Data Services

49 BROADWAY BLVD & COAL AVE AM
Thursday, May 30, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BROADWAY BLVD					BROADWAY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	5	30	7	0	0	0	0	0	0	0	0	51	4	0	1	6	16	0	0	120	705
6:15 AM	0	10	44	2	0	0	0	0	0	0	0	0	50	6	0	0	8	40	0	0	160	838
6:30 AM	0	20	54	6	0	0	0	0	0	0	0	0	55	8	0	0	5	48	0	0	196	975
6:45 AM	0	8	67	10	0	0	0	0	0	0	0	0	66	12	0	0	15	51	0	0	229	1,200
7:00 AM	0	9	76	8	0	0	0	0	0	0	0	0	82	10	0	0	14	54	0	0	253	1,349
7:15 AM	0	6	99	9	0	0	0	0	0	0	0	0	108	12	0	0	16	47	0	0	297	1,508
7:30 AM	0	13	140	18	0	0	0	0	0	0	0	0	128	19	0	0	24	79	0	0	421	1,568
7:45 AM	0	12	130	14	0	0	0	0	0	0	0	0	121	20	0	0	24	57	0	0	378	1,521
8:00 AM	0	16	110	12	0	0	0	0	0	0	0	0	148	16	0	0	15	95	0	0	412	1,458
8:15 AM	0	23	120	15	0	0	0	0	0	0	0	0	98	9	0	0	19	73	0	0	357	0
8:30 AM	0	13	106	18	0	0	0	0	0	0	0	0	111	24	0	1	19	82	0	0	374	0
8:45 AM	0	9	99	8	0	0	0	0	0	0	0	0	88	12	0	1	15	83	0	0	315	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	0	0	7
Lights	0	64	495	58	0	0	0	0	0	0	0	0	473	64	0	0	80	282	0	0	1,516
Mediums	0	0	5	1	0	0	0	0	0	0	0	0	18	0	0	0	1	20	0	0	45
Total	0	64	500	59	0	0	0	0	0	0	0	0	495	64	0	0	82	304	0	0	1,568
Bicycles on Road	0	0	6	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
Bicycles on Crosswalk			1					1					0					0			2
Heavy Vehicle Percentage			0.0%					0.0%					0.7%					0.8%			0.4%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	1.2%	0.7%	0.0%	0.0%	0.4%
Peak Hour Factor (PHF)			0.91					0.00					0.87					0.92			0.93
Peak Hour Factor (PHF)	0.00	0.70	0.89	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.72	0.00	0.50	0.85	0.88	0.00	0.00	0.93

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Lights																					
6:00 AM	0	5	28	7	0	0	0	0	0	0	0	0	49	4	0	0	6	14	0	0	113
6:15 AM	0	10	42	2	0	0	0	0	0	0	0	0	48	6	0	0	8	39	0	0	155
6:30 AM	0	20	54	6	0	0	0	0	0	0	0	0	53	8	0	0	5	47	0	0	193
6:45 AM	0	8	65	10	0	0	0	0	0	0	0	0	64	12	0	0	15	45	0	0	219
7:00 AM	0	8	73	8	0	0	0	0	0	0	0	0	77	9	0	0	13	49	0	0	237
7:15 AM	0	6	99	9	0	0	0	0	0	0	0	0	107	12	0	0	16	44	0	0	293
7:30 AM	0	13	139	17	0	0	0	0	0	0	0	0	123	19	0	0	24	73	0	0	408
7:45 AM	0	12	130	14	0	0	0	0	0	0	0	0	117	20	0	0	23	54	0	0	370
8:00 AM	0	16	108	12	0	0	0	0	0	0	0	0	141	16	0	0	15	88	0	0	396
8:15 AM	0	23	118	15	0	0	0	0	0	0	0	0	92	9	0	0	18	67	0	0	342
8:30 AM	0	13	106	18	0	0	0	0	0	0	0	0	106	24	0	1	18	73	0	0	359
8:45 AM	0	9	97	8	0	0	0	0	0	0	0	0	84	11	0	1	15	73	0	0	298
Mediums																					
6:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	6
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	5
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
6:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6	0	0	10
7:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	5	1	0	0	1	5	0	0	15
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
7:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	4	0	0	0	0	6	0	0	12
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	6
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	5	0	0	0	0	7	0	0	14
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0	0	0	5	0	0	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	8	0	0	14
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	3	1	0	0	0	10	0	0	16
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	2	2	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	3	0	0	0	0	0	0	0	1	1
7:45 AM	3	0	3	1	0	1	0	0	0	0	0	0
8:00 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:15 AM	1	1	2	0	1	1	0	0	0	0	0	0
8:30 AM	1	2	3	0	0	0	0	0	0	0	0	0
8:45 AM	1	1	2	2	1	3	0	0	0	0	1	1

All Traffic Data Services

49 BROADWAY BLVD & COAL AVE Noon
Thursday, May 30, 2024

Peak Hour
11:00 AM - 12:00 PM
Peak 15-Minutes
11:45 AM - 12:00 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BROADWAY BLVD					BROADWAY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	10	115	17	0	0	0	0	0	0	0	0	91	14	0	0	26	106	0	0	379	1,495
11:15 AM	0	12	117	15	0	0	0	0	0	0	0	0	100	19	0	0	22	102	0	0	387	1,489
11:30 AM	0	8	84	13	0	0	0	0	0	0	0	0	90	12	0	0	16	113	0	0	336	1,448
11:45 AM	0	8	109	19	0	0	0	0	0	0	0	0	101	12	0	1	24	119	0	0	393	1,478
12:00 PM	0	7	127	8	0	0	0	0	0	0	0	0	89	11	0	0	17	114	0	0	373	1,438
12:15 PM	0	10	102	17	0	0	0	0	0	0	0	0	98	21	0	1	14	83	0	0	346	1,430
12:30 PM	0	8	129	27	0	0	0	0	0	0	0	0	97	10	0	1	17	77	0	0	366	1,429
12:45 PM	0	10	121	13	0	0	0	0	0	0	0	0	102	9	0	2	15	81	0	0	353	1,425
1:00 PM	0	17	111	19	0	0	0	0	0	0	0	0	81	19	0	3	19	96	0	0	365	1,446
1:15 PM	0	7	116	8	0	0	0	0	0	0	0	0	102	12	0	0	19	81	0	0	345	0
1:30 PM	0	11	100	16	0	0	0	0	0	0	0	0	85	12	0	0	23	115	0	0	362	0
1:45 PM	0	13	114	16	0	0	0	0	0	0	0	0	99	16	0	1	11	104	0	0	374	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	7	0	0	10
Lights	0	37	415	60	0	0	0	0	0	0	0	0	360	53	0	1	82	407	0	0	1,415
Mediums	0	1	10	3	0	0	0	0	0	0	0	0	21	4	0	0	5	26	0	0	70
Total	0	38	425	64	0	0	0	0	0	0	0	0	382	57	0	1	88	440	0	0	1,495
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.2%					0.0%					0.2%					1.5%			0.7%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	1.1%	1.6%	0.0%	0.0%	0.7%
Peak Hour Factor (PHF)			0.89					0.00					0.92					0.92			0.95
Peak Hour Factor (PHF)	0.00	0.71	0.93	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.70	0.00	0.58	0.85	0.94	0.00	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
Lights																					
11:00 AM	0	10	109	16	0	0	0	0	0	0	0	0	85	14	0	0	23	97	0	0	354
11:15 AM	0	12	114	14	0	0	0	0	0	0	0	0	92	17	0	0	20	95	0	0	364
11:30 AM	0	7	83	12	0	0	0	0	0	0	0	0	86	11	0	0	16	103	0	0	318
11:45 AM	0	8	109	18	0	0	0	0	0	0	0	0	97	11	0	1	23	112	0	0	379
12:00 PM	0	7	125	8	0	0	0	0	0	0	0	0	87	11	0	0	17	107	0	0	362
12:15 PM	0	10	98	17	0	0	0	0	0	0	0	0	94	20	0	1	14	81	0	0	335
12:30 PM	0	8	126	26	0	0	0	0	0	0	0	0	93	10	0	1	17	72	0	0	353
12:45 PM	0	10	119	13	0	0	0	0	0	0	0	0	96	9	0	2	15	76	0	0	340
1:00 PM	0	15	110	19	0	0	0	0	0	0	0	0	77	19	0	3	18	91	0	0	352
1:15 PM	0	7	113	8	0	0	0	0	0	0	0	0	97	12	0	0	19	75	0	0	331
1:30 PM	0	11	97	16	0	0	0	0	0	0	0	0	82	9	0	0	23	108	0	0	346
1:45 PM	0	13	113	16	0	0	0	0	0	0	0	0	96	16	0	1	11	97	0	0	363
Mediums																					
11:00 AM	0	0	6	1	0	0	0	0	0	0	0	0	6	0	0	0	3	7	0	0	23
11:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	8	2	0	0	1	6	0	0	20
11:30 AM	0	1	1	1	0	0	0	0	0	0	0	0	4	1	0	0	0	8	0	0	16
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	3	1	0	0	1	5	0	0	11
12:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	8
12:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	0	8
12:30 PM	0	0	3	1	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	10
12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	0	0	12
1:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	4	0	0	10
1:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	13
1:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	2	3	0	0	0	7	0	0	15
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	7
Bicycles on Road																					
11:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	1	0	1	1	0	1	0	0	0
11:15 AM	0	2	2	0	0	0	0	0	0	1	0	1
11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0
11:45 AM	1	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	1	1	2	0	0	0	0	0	0	0	1	1
12:15 PM	1	0	1	3	3	6	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:00 PM	0	1	1	1	0	1	0	0	0	0	0	0
1:15 PM	1	2	3	2	2	4	0	0	0	0	0	0
1:30 PM	0	0	0	3	1	4	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

49 BROADWAY BLVD & COAL AVE PM
Thursday, May 30, 2024

Peak Hour
04:15 PM - 05:15 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	COAL AVE					COAL AVE					BROADWAY BLVD					BROADWAY BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	10	150	14	0	0	0	0	0	0	0	0	121	14	0	1	22	133	0	0	465	1,884
3:45 PM	0	9	130	16	0	0	0	0	0	0	0	0	156	24	0	1	14	111	0	0	461	1,892
4:00 PM	0	11	130	17	0	0	0	0	0	0	0	0	157	18	0	1	23	129	0	0	486	1,877
4:15 PM	0	11	147	24	0	0	0	0	0	0	0	0	107	18	0	0	23	142	0	0	472	1,962
4:30 PM	0	10	151	13	0	0	0	0	0	0	0	0	137	12	0	0	29	121	0	0	473	1,917
4:45 PM	0	15	154	19	0	0	0	0	0	0	0	0	108	14	0	0	14	122	0	0	446	1,831
5:00 PM	0	10	180	27	0	0	0	0	0	0	0	0	137	17	0	1	35	164	0	0	571	1,790
5:15 PM	0	15	175	18	0	0	0	0	0	0	0	0	86	15	0	1	13	104	0	0	427	1,583
5:30 PM	0	13	105	10	0	0	0	0	0	0	0	0	116	12	0	1	20	110	0	0	387	1,526
5:45 PM	0	10	133	10	0	0	0	0	0	0	0	0	90	20	0	0	22	120	0	0	405	0
6:00 PM	0	17	140	11	0	0	0	0	0	0	0	0	74	14	0	1	17	90	0	0	364	0
6:15 PM	0	20	98	12	0	0	0	0	0	0	1	0	150	7	0	3	12	67	0	0	370	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Lights	0	46	627	80	0	0	0	0	0	0	0	0	478	60	0	1	100	532	0	0	1,924
Mediums	0	0	5	3	0	0	0	0	0	0	0	0	10	1	0	0	1	16	0	0	36
Total	0	46	632	83	0	0	0	0	0	0	0	0	489	61	0	1	101	549	0	0	1,962
Bicycles on Road	0	0	5	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	10
Bicycles on Crosswalk			1					0					0					1			2
Heavy Vehicle Percentage			0.0%					0.0%					0.2%					0.2%			0.1%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%
Peak Hour Factor (PHF)			0.91					0.00					0.87					0.81			0.86
Peak Hour Factor (PHF)	0.00	0.75	0.92	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.89	0.77	0.00	0.42	0.72	0.84	0.00	0.00	0.86

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Lights																					
3:30 PM	0	10	150	14	0	0	0	0	0	0	0	0	112	14	0	1	21	130	0	0	452
3:45 PM	0	9	128	16	0	0	0	0	0	0	0	0	147	24	0	1	14	108	0	0	447
4:00 PM	0	11	129	17	0	0	0	0	0	0	0	0	154	18	0	1	22	125	0	0	477
4:15 PM	0	11	145	22	0	0	0	0	0	0	0	0	102	17	0	0	23	138	0	0	458
4:30 PM	0	10	150	12	0	0	0	0	0	0	0	0	137	12	0	0	29	119	0	0	469
4:45 PM	0	15	153	19	0	0	0	0	0	0	0	0	103	14	0	0	13	115	0	0	432
5:00 PM	0	10	179	27	0	0	0	0	0	0	0	0	136	17	0	1	35	160	0	0	565
5:15 PM	0	15	175	18	0	0	0	0	0	0	0	0	85	15	0	1	13	104	0	0	426
5:30 PM	0	13	104	10	0	0	0	0	0	0	0	0	112	12	0	1	20	108	0	0	380
5:45 PM	0	10	132	9	0	0	0	0	0	0	0	0	89	20	0	0	22	118	0	0	400
6:00 PM	0	17	139	11	0	0	0	0	0	0	0	0	73	14	0	1	16	88	0	0	359
6:15 PM	0	20	98	12	0	0	0	0	0	0	1	0	145	7	0	3	11	67	0	0	364
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	0	0	12
3:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	0	0	14
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	1	3	0	0	8
4:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	5	1	0	0	0	4	0	0	14
4:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	1	6	0	0	13
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	6
5:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	5
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	4
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:30 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
5:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	1	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:15 PM	3	0	3	0	0	0	0	0	0	0	0	0
4:30 PM	0	4	4	1	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:30 PM	1	1	2	2	0	2	0	0	0	2	0	2
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0
6:00 PM	0	2	2	0	0	0	0	0	0	0	0	0
6:15 PM	1	0	1	2	0	2	0	0	0	0	1	1

All Traffic Data Services

50 YALE BLVD & GARFIELD AVE AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
08:15 AM - 08:30 AM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
6:00 AM	0	0	0	0	0	0	5	0	5	0	0	0	26	4	0	0	0	13	0	0	53	295
6:15 AM	0	0	0	0	0	0	1	0	7	0	0	0	32	1	0	0	2	20	0	0	63	366
6:30 AM	0	0	0	0	0	0	3	0	4	0	0	0	38	0	0	0	2	31	0	0	78	448
6:45 AM	0	0	0	0	0	0	7	0	8	0	0	0	47	2	0	0	3	34	0	0	101	529
7:00 AM	0	0	0	0	0	0	1	0	5	0	0	0	77	2	0	0	2	37	0	0	124	601
7:15 AM	0	0	0	0	0	0	6	0	1	0	0	0	62	5	0	0	0	71	0	0	145	651
7:30 AM	0	0	0	0	0	0	7	0	11	0	0	0	83	1	0	0	4	53	0	0	159	684
7:45 AM	0	0	0	0	0	0	7	0	6	0	1	0	82	4	0	0	1	72	0	0	173	688
8:00 AM	0	0	0	0	0	0	4	0	7	0	0	0	103	2	0	0	2	56	0	0	174	696
8:15 AM	0	0	0	0	0	0	6	0	10	0	0	0	95	2	0	0	2	63	0	0	178	0
8:30 AM	0	0	0	0	0	0	13	0	6	0	0	0	82	4	0	0	2	56	0	0	163	0
8:45 AM	0	1	0	0	0	0	5	1	10	0	0	0	83	1	0	0	7	73	0	0	181	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	24	0	33	0	1	0	336	9	0	0	8	236	0	0	647
Mediums	0	0	0	0	0	0	0	0	1	0	0	0	27	0	0	0	1	8	0	0	37
Total	0	0	0	0	0	0	24	0	34	0	1	0	363	9	0	0	9	244	0	0	684
Bicycles on Road	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.25					0.82					0.89					0.82			17.79
Peak Hour Factor (PHF)	0.00	0.25	0.00	0.00	0.00	0.00	0.58	0.25	0.77	0.00	0.25	0.00	0.88	0.60	0.00	0.00	0.46	0.88	0.00	0.00	17.79

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights																					
6:00 AM	0	0	0	0	0	0	5	0	5	0	0	0	26	4	0	0	0	13	0	0	53
6:15 AM	0	0	0	0	0	0	1	0	7	0	0	0	31	1	0	0	2	19	0	0	61
6:30 AM	0	0	0	0	0	0	3	0	4	0	0	0	37	0	0	0	2	30	0	0	76
6:45 AM	0	0	0	0	0	0	7	0	8	0	0	0	44	2	0	0	2	33	0	0	96
7:00 AM	0	0	0	0	0	0	1	0	4	0	0	0	72	2	0	0	2	36	0	0	117
7:15 AM	0	0	0	0	0	0	6	0	1	0	0	0	60	5	0	0	0	67	0	0	139
7:30 AM	0	0	0	0	0	0	7	0	11	0	0	0	75	1	0	0	3	52	0	0	149
7:45 AM	0	0	0	0	0	0	7	0	6	0	1	0	77	4	0	0	1	70	0	0	166
8:00 AM	0	0	0	0	0	0	4	0	6	0	0	0	98	2	0	0	2	54	0	0	166
8:15 AM	0	0	0	0	0	0	6	0	10	0	0	0	86	2	0	0	2	60	0	0	166
8:30 AM	0	0	0	0	0	0	13	0	6	0	0	0	77	3	0	0	1	56	0	0	156
8:45 AM	0	1	0	0	0	0	5	1	10	0	0	0	78	1	0	0	7	71	0	0	174
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	4
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	1	0	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	1	0	0	10
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0	2	0	0	8
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	0	0	12
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	1	0	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	6
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	1	2	0	0	0	0	0	0
6:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	3	3	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	1	1	1	1	2	0	0	0	0	0	0
6:15 AM	0	0	0	1	1	2	0	0	0	0	0	0
6:30 AM	0	0	0	1	2	3	0	0	0	0	0	0
6:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:00 AM	0	0	0	1	2	3	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	2	0	0	0	0	2	2	0	0	0
7:45 AM	0	0	0	3	0	3	0	0	0	0	0	0
8:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	2	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	1	2
8:45 AM	0	0	0	1	1	2	0	0	0	0	0	0

All Traffic Data Services

50 YALE BLVD & GARFIELD AVE Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	0	0	1	0	0	7	0	8	0	0	0	102	5	0	0	1	74	0	0	198	763
11:15 AM	0	0	0	0	0	0	7	0	7	0	0	1	101	2	0	0	3	61	0	0	182	781
11:30 AM	0	0	0	0	0	0	7	0	7	0	0	1	97	5	0	0	0	73	0	0	190	827
11:45 AM	0	1	0	0	0	0	12	0	6	0	0	0	92	4	0	1	1	75	1	0	193	878
12:00 PM	0	1	0	0	0	0	10	0	7	0	0	0	107	2	0	0	4	85	0	0	216	884
12:15 PM	0	1	0	0	0	0	8	0	7	0	0	0	113	9	0	1	5	84	0	0	228	878
12:30 PM	0	0	0	1	0	0	12	0	3	0	0	0	102	5	0	0	2	116	0	0	241	856
12:45 PM	0	0	0	0	0	0	12	0	9	0	0	0	98	2	0	0	2	76	0	0	199	832
1:00 PM	0	0	0	0	0	0	6	0	3	0	0	0	101	9	0	0	3	88	0	0	210	823
1:15 PM	0	0	0	0	0	0	5	0	6	0	0	0	97	3	0	0	1	94	0	0	206	0
1:30 PM	0	0	0	1	0	0	9	0	9	0	0	2	98	5	0	0	2	91	0	0	217	0
1:45 PM	0	0	0	0	0	0	5	0	8	0	0	0	76	4	0	0	8	89	0	0	190	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
Lights	0	2	0	1	0	0	42	0	26	0	0	0	399	18	0	1	13	349	0	0	851
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	10	0	0	30
Total	0	2	0	1	0	0	42	0	26	0	0	0	420	18	0	1	13	361	0	0	884
Bicycles on Road	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	4
Bicycles on Crosswalk			1					2					0					0			3
Heavy Vehicle Percentage			0.0%					0.0%					0.2%					0.5%			0.3%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.3%
Peak Hour Factor (PHF)			1.00					0.81					0.90					0.81			13.30
Peak Hour Factor (PHF)	0.00	0.75	0.00	0.25	0.00	0.00	0.88	0.00	0.88	0.00	0.00	0.25	0.93	0.69	0.00	0.50	0.44	0.81	0.25	0.00	13.30

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	0	0	1	0	0	6	0	8	0	0	0	95	5	0	0	1	74	0	0	190
11:15 AM	0	0	0	0	0	0	7	0	7	0	0	1	95	2	0	0	3	58	0	0	173
11:30 AM	0	0	0	0	0	0	7	0	7	0	0	1	91	5	0	0	0	72	0	0	183
11:45 AM	0	1	0	0	0	0	12	0	6	0	0	0	88	4	0	1	1	74	1	0	188
12:00 PM	0	1	0	0	0	0	10	0	7	0	0	0	101	2	0	0	4	82	0	0	207
12:15 PM	0	1	0	0	0	0	8	0	7	0	0	0	107	9	0	1	5	80	0	0	218
12:30 PM	0	0	0	1	0	0	12	0	3	0	0	0	97	5	0	0	2	114	0	0	234
12:45 PM	0	0	0	0	0	0	12	0	9	0	0	0	94	2	0	0	2	73	0	0	192
1:00 PM	0	0	0	0	0	0	6	0	3	0	0	0	95	8	0	0	3	87	0	0	202
1:15 PM	0	0	0	0	0	0	4	0	6	0	0	0	90	3	0	0	1	93	0	0	197
1:30 PM	0	0	0	1	0	0	9	0	9	0	0	2	93	4	0	0	2	87	0	0	207
1:45 PM	0	0	0	0	0	0	5	0	8	0	0	0	74	4	0	0	8	85	0	0	184
Mediums																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0	9
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	6
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	5
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0	9
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	0	0	8
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	0	7
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	6
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	1	0	0	8
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	1	0	0	9
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	4	0	0	10
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	6
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:15 PM	1	0	1	0	1	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
1:45 PM	1	0	1	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
11:15 AM	1	2	3	0	3	3	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	1	0	2	2	0	0	0	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	2	0	2	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	1	0	3	3	0	0	0	0	0	0
1:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	1	0	1	1	0	0	0
1:30 PM	0	1	1	2	0	2	0	0	0	0	0	0
1:45 PM	1	0	1	2	1	3	0	0	0	0	0	0

All Traffic Data Services

50 YALE BLVD & GARFIELD AVE PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					YALE BLVD					YALE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	0	0	2	0	0	6	0	9	0	0	0	107	10	0	0	4	87	0	0	225	1,037
3:45 PM	0	0	0	1	0	0	11	0	10	0	0	1	123	11	0	0	5	114	0	0	276	1,120
4:00 PM	0	0	0	1	0	0	7	0	12	0	0	1	128	5	0	0	3	112	0	0	269	1,141
4:15 PM	0	0	0	1	0	0	8	0	10	0	0	0	125	11	0	0	3	108	1	0	267	1,145
4:30 PM	0	0	0	0	0	0	10	0	13	0	0	0	133	10	0	0	5	137	0	0	308	1,159
4:45 PM	0	0	0	0	0	0	10	0	9	0	0	0	142	9	0	0	6	121	0	0	297	1,125
5:00 PM	0	0	0	0	0	0	12	0	11	0	0	0	119	5	0	0	9	117	0	0	273	1,069
5:15 PM	0	1	0	0	0	0	10	0	13	0	0	1	119	9	0	0	11	115	2	0	281	1,064
5:30 PM	0	0	0	1	0	0	15	0	7	0	0	0	125	5	0	0	7	114	0	0	274	1,040
5:45 PM	0	0	0	0	0	0	10	0	9	0	0	0	97	9	0	0	12	104	0	0	241	0
6:00 PM	0	0	0	1	0	0	8	0	10	0	0	0	117	6	0	0	13	113	0	0	268	0
6:15 PM	0	1	0	0	0	0	20	0	11	0	0	0	88	7	0	0	9	121	0	0	257	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	1	0	0	0	0	42	0	43	0	0	1	506	33	0	0	31	482	2	0	1,141
Mediums	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	0	0	8	0	0	18
Total	0	1	0	0	0	0	42	0	46	0	0	1	513	33	0	0	31	490	2	0	1,159
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Bicycles on Crosswalk			2					2					0					0			4
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.63					0.73					0.93					0.92			14.39
Peak Hour Factor (PHF)	0.00	0.25	0.00	0.63	0.00	0.00	0.66	0.00	0.88	0.00	0.00	0.50	0.93	0.84	0.00	0.00	0.83	0.89	0.25	0.00	14.39

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	0	0	2	0	0	6	0	9	0	0	0	104	10	0	0	4	87	0	0	222
3:45 PM	0	0	0	1	0	0	11	0	10	0	0	1	121	11	0	0	5	112	0	0	272
4:00 PM	0	0	0	1	0	0	7	0	12	0	0	1	124	5	0	0	3	111	0	0	264
4:15 PM	0	0	0	1	0	0	8	0	10	0	0	0	124	11	0	0	3	106	1	0	264
4:30 PM	0	0	0	0	0	0	10	0	12	0	0	0	130	10	0	0	5	135	0	0	302
4:45 PM	0	0	0	0	0	0	10	0	7	0	0	0	140	9	0	0	6	118	0	0	290
5:00 PM	0	0	0	0	0	0	12	0	11	0	0	0	118	5	0	0	9	117	0	0	272
5:15 PM	0	1	0	0	0	0	10	0	13	0	0	1	118	9	0	0	11	112	2	0	277
5:30 PM	0	0	0	1	0	0	15	0	7	0	0	0	121	5	0	0	7	114	0	0	270
5:45 PM	0	0	0	0	0	0	10	0	9	0	0	0	96	9	0	0	12	103	0	0	239
6:00 PM	0	0	0	1	0	0	8	0	10	0	0	0	116	6	0	0	13	113	0	0	267
6:15 PM	0	1	0	0	0	0	20	0	11	0	0	0	88	7	0	0	9	119	0	0	255
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	2	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	3	0	0	7
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	1	1	1	2	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	0	2	2	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:00 PM	2	0	2	0	2	2	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	2	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:00 PM	0	1	1	0	1	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	2	0	0	0	0	0	0
5:30 PM	2	1	3	1	1	2	0	0	0	1	0	1
5:45 PM	1	0	1	1	2	3	0	1	1	0	0	0
6:00 PM	2	0	2	0	1	1	0	0	0	0	0	0
6:15 PM	0	2	2	1	2	3	0	3	3	0	0	0

All Traffic Data Services

51 GIRARD BLVD & GARFIELD AVE AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
08:15 AM - 08:30 AM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	4	0	0	0	0	1	1	0	0	1	6	1	0	0	1	7	1	0	23	150
6:15 AM	0	0	3	1	0	0	0	3	1	0	0	2	13	0	0	0	1	13	1	0	38	187
6:30 AM	0	1	2	0	0	0	2	0	1	0	0	1	15	0	0	0	0	10	0	0	32	233
6:45 AM	0	1	1	0	0	0	2	1	1	0	0	1	28	1	0	0	0	19	2	0	57	302
7:00 AM	0	1	3	3	0	0	1	4	2	0	0	1	24	0	0	0	2	17	2	0	60	361
7:15 AM	0	2	12	2	0	0	2	4	4	0	0	2	33	0	0	0	3	20	0	0	84	397
7:30 AM	0	3	1	3	0	0	4	10	1	0	0	6	36	0	0	0	3	33	1	0	101	433
7:45 AM	0	1	1	0	0	0	2	10	4	0	0	1	55	4	0	0	0	37	1	0	116	407
8:00 AM	0	2	2	2	0	0	1	1	1	0	0	4	51	2	0	0	3	27	0	0	96	385
8:15 AM	0	2	2	3	0	0	2	3	3	0	0	3	63	1	0	0	0	34	4	0	120	0
8:30 AM	0	1	5	4	0	0	2	4	2	0	0	2	33	2	0	0	0	19	1	0	75	0
8:45 AM	0	5	2	1	0	0	2	0	2	0	0	2	42	1	0	0	1	33	3	0	94	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	8	6	7	0	0	9	24	9	0	0	14	202	6	0	0	6	126	4	0	421
Mediums	0	0	0	1	0	0	0	0	0	0	0	0	3	1	0	0	0	5	2	0	12
Total	0	8	6	8	0	0	9	24	9	0	0	14	205	7	0	0	6	131	6	0	433
Bicycles on Road	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.50					0.75					0.84					0.94			26.39
Peak Hour Factor (PHF)	0.00	0.50	0.38	0.63	0.00	0.00	0.56	0.70	0.69	0.00	0.00	0.58	0.81	0.56	0.00	0.00	0.75	0.89	0.50	0.00	26.39

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	4	0	0	0	0	1	1	0	0	1	6	1	0	0	1	7	1	0	23
6:15 AM	0	0	3	1	0	0	0	3	1	0	0	2	13	0	0	0	1	12	1	0	37
6:30 AM	0	0	2	0	0	0	2	0	1	0	0	1	13	0	0	0	0	9	0	0	28
6:45 AM	0	1	1	0	0	0	2	1	1	0	0	1	28	1	0	0	0	18	2	0	56
7:00 AM	0	1	3	3	0	0	1	4	2	0	0	1	24	0	0	0	2	16	2	0	59
7:15 AM	0	2	12	2	0	0	2	4	4	0	0	2	32	0	0	0	3	19	0	0	82
7:30 AM	0	3	1	3	0	0	4	10	1	0	0	6	36	0	0	0	3	30	1	0	98
7:45 AM	0	1	1	0	0	0	2	10	4	0	0	1	55	4	0	0	0	36	0	0	114
8:00 AM	0	2	2	2	0	0	1	1	1	0	0	4	50	1	0	0	3	26	0	0	93
8:15 AM	0	2	2	2	0	0	2	3	3	0	0	3	61	1	0	0	0	34	3	0	116
8:30 AM	0	1	4	2	0	0	1	4	1	0	0	2	33	2	0	0	0	19	1	0	70
8:45 AM	0	5	2	1	0	0	2	0	1	0	0	2	40	1	0	0	1	32	2	0	89
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	4
8:30 AM	0	0	1	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	1	1	0	5
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	1	2	0	0	0	0	2	2
6:45 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:00 AM	0	3	3	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	2	0	2	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:45 AM	0	2	2	0	0	0	0	0	0	0	0	0

All Traffic Data Services

51 GIRARD BLVD & GARFIELD AVE Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	7	4	2	0	0	1	2	2	0	0	3	33	1	0	0	0	34	2	0	91	403
11:15 AM	0	0	4	1	0	0	0	4	1	0	0	2	41	1	0	0	1	40	2	0	97	414
11:30 AM	0	1	6	1	0	0	2	7	5	0	0	5	40	1	0	0	1	44	7	0	120	421
11:45 AM	0	2	1	5	0	0	1	1	3	0	0	2	42	1	0	0	0	34	3	0	95	410
12:00 PM	0	3	1	1	0	0	0	7	2	0	0	6	44	1	0	0	0	34	3	0	102	417
12:15 PM	0	3	5	4	0	0	3	5	2	0	0	4	38	1	0	0	0	37	2	0	104	420
12:30 PM	0	5	3	2	0	0	4	3	1	0	0	1	35	1	0	0	1	47	6	0	109	400
12:45 PM	0	1	1	2	0	0	1	5	3	0	0	1	38	1	0	0	1	42	6	0	102	392
1:00 PM	0	0	8	0	0	0	0	5	3	0	0	1	43	0	0	0	2	41	2	0	105	390
1:15 PM	0	0	1	2	0	0	0	6	1	0	0	2	32	1	0	0	1	33	5	0	84	0
1:30 PM	0	2	4	2	0	0	4	7	1	0	0	3	39	1	0	0	0	34	4	0	101	0
1:45 PM	0	0	6	1	0	0	1	4	3	0	0	1	35	1	0	0	1	42	5	0	100	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	12	10	9	0	0	8	20	8	0	0	12	153	4	0	0	2	159	17	0	414
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
Total	0	12	10	9	0	0	8	20	8	0	0	12	155	4	0	0	2	160	17	0	417
Bicycles on Road	0	0	3	0	0	0	0	7	0	0	0	0	2	0	0	0	0	0	0	0	12
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.73					0.68					0.91					0.87			29.41
Peak Hour Factor (PHF)	0.00	0.65	0.59	0.60	0.00	0.00	0.50	0.82	0.60	0.00	0.00	0.71	0.95	1.00	0.00	0.00	0.63	0.89	0.79	0.00	29.41

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	7	4	2	0	0	1	2	2	0	0	3	33	1	0	0	0	33	2	0	90
11:15 AM	0	0	4	1	0	0	0	4	1	0	0	2	40	1	0	0	1	40	2	0	96
11:30 AM	0	1	6	1	0	0	2	7	5	0	0	5	39	1	0	0	1	43	7	0	118
11:45 AM	0	2	1	5	0	0	1	1	3	0	0	2	41	1	0	0	0	34	3	0	94
12:00 PM	0	3	1	1	0	0	0	7	2	0	0	6	43	1	0	0	0	33	3	0	100
12:15 PM	0	3	5	4	0	0	3	5	2	0	0	4	37	1	0	0	0	37	2	0	103
12:30 PM	0	5	3	2	0	0	4	3	1	0	0	1	35	1	0	0	1	47	6	0	109
12:45 PM	0	1	1	2	0	0	1	5	3	0	0	1	38	1	0	0	1	42	6	0	102
1:00 PM	0	0	8	0	0	0	0	5	3	0	0	1	41	0	0	0	2	38	2	0	100
1:15 PM	0	0	1	2	0	0	0	6	1	0	0	1	31	1	0	0	1	32	5	0	81
1:30 PM	0	2	4	2	0	0	4	6	1	0	0	3	38	1	0	0	0	33	4	0	98
1:45 PM	0	0	6	1	0	0	1	4	3	0	0	1	34	1	0	0	1	41	5	0	98
Mediums																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	5
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	3
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	3
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	5
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	6
12:15 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	1	0	1	1	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	1	0	1	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	1	0	1	0	0	0	1	0	1
12:00 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:15 PM	0	2	2	1	0	1	1	0	1	1	0	1
12:30 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	1	1
1:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

51 GIRARD BLVD & GARFIELD AVE PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:15 PM - 05:30 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					GIRARD BLVD					GIRARD BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	6	5	2	0	0	2	4	3	0	0	2	60	4	0	0	3	40	0	0	131	541
3:45 PM	0	4	10	0	0	0	3	10	1	0	0	2	49	2	0	0	1	40	3	0	125	573
4:00 PM	0	1	3	2	0	0	0	5	4	0	0	2	53	3	0	0	2	64	2	0	141	603
4:15 PM	0	5	3	4	0	0	3	6	0	0	0	3	56	0	0	0	2	60	2	0	144	622
4:30 PM	0	9	3	3	0	0	4	6	1	0	0	2	59	2	0	0	3	63	8	0	163	644
4:45 PM	0	4	6	2	0	0	2	7	2	0	0	4	63	0	0	0	3	55	7	0	155	631
5:00 PM	0	4	6	0	0	0	3	8	1	0	0	3	53	2	0	0	5	63	12	0	160	615
5:15 PM	0	4	5	5	0	0	1	9	6	0	0	2	62	4	0	0	4	61	3	0	166	575
5:30 PM	0	1	7	1	0	0	3	9	6	0	0	8	53	2	0	0	3	49	8	0	150	532
5:45 PM	0	8	3	5	0	0	3	13	1	0	0	2	49	1	0	0	2	49	3	0	139	0
6:00 PM	0	0	4	3	0	0	2	5	2	0	0	6	43	0	0	0	2	51	2	0	120	0
6:15 PM	0	1	4	1	0	0	1	6	3	0	0	4	45	3	0	0	2	46	7	0	123	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	21	20	10	0	0	10	30	10	0	0	11	236	8	0	0	15	239	30	0	640
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
Total	0	21	20	10	0	0	10	30	10	0	0	11	237	8	0	0	15	242	30	0	644
Bicycles on Road	0	0	3	1	0	0	1	2	0	0	0	0	2	0	0	0	0	1	0	0	10
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.85					0.88					0.94					0.90			26.71
Peak Hour Factor (PHF)	0.00	0.61	0.86	0.70	0.00	0.00	0.75	0.75	0.63	0.00	0.00	0.63	0.94	0.56	0.00	0.00	0.75	0.95	0.63	0.00	26.71

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	6	5	2	0	0	2	4	3	0	0	2	59	4	0	0	3	37	0	0	127
3:45 PM	0	4	9	0	0	0	3	10	1	0	0	2	49	2	0	0	1	39	3	0	123
4:00 PM	0	1	3	2	0	0	0	5	4	0	0	2	52	3	0	0	2	64	2	0	140
4:15 PM	0	5	3	4	0	0	3	6	0	0	0	3	55	0	0	0	2	59	2	0	142
4:30 PM	0	9	3	3	0	0	4	6	1	0	0	2	59	2	0	0	3	62	8	0	162
4:45 PM	0	4	6	2	0	0	2	7	2	0	0	4	63	0	0	0	3	55	7	0	155
5:00 PM	0	4	6	0	0	0	3	8	1	0	0	3	52	2	0	0	5	61	12	0	157
5:15 PM	0	4	5	5	0	0	1	9	6	0	0	2	62	4	0	0	4	61	3	0	166
5:30 PM	0	1	7	1	0	0	3	9	5	0	0	8	53	2	0	0	3	49	7	0	148
5:45 PM	0	8	3	5	0	0	3	13	1	0	0	2	49	1	0	0	2	49	3	0	139
6:00 PM	0	0	4	3	0	0	2	5	2	0	0	6	42	0	0	0	2	50	2	0	118
6:15 PM	0	1	4	1	0	0	1	6	3	0	0	4	45	3	0	0	2	46	7	0	123
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
3:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
3:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	5
4:30 PM	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	5
5:30 PM	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	2	2	0	0	0	0	1	1	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	0	1	0	0	0
4:15 PM	1	5	6	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	2	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	2	0	0	0
5:00 PM	1	0	1	0	0	0	0	0	0	0	2	2
5:15 PM	2	0	2	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	1	0	1	1	2	1	3
5:45 PM	0	0	0	0	0	0	1	0	1	0	0	0
6:00 PM	0	1	1	0	0	0	0	0	0	0	1	1
6:15 PM	0	1	1	1	0	1	0	2	2	1	0	1

All Traffic Data Services

52 CARLISLE BLVD & GARFIELD AVE AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:30 AM - 07:45 AM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	0	1	2	0	0	0	0	0	0	0	1	16	0	0	0	0	14	0	0	34	236
6:15 AM	0	0	2	2	0	0	0	0	1	0	0	0	18	0	0	0	0	24	1	0	48	338
6:30 AM	0	1	0	1	0	0	0	0	1	0	0	1	37	0	0	0	0	28	1	0	70	478
6:45 AM	0	0	0	3	0	0	0	1	0	0	0	1	31	1	0	0	0	47	0	0	84	575
7:00 AM	0	0	1	2	0	0	1	2	0	0	0	3	50	0	0	0	0	75	2	0	136	648
7:15 AM	0	1	1	6	0	0	5	3	1	0	0	3	71	1	0	0	0	95	1	0	188	671
7:30 AM	0	3	1	2	0	0	0	1	1	0	0	3	82	2	0	0	1	70	1	0	167	638
7:45 AM	0	0	2	2	0	0	0	3	0	0	0	0	80	0	0	0	2	68	0	0	157	611
8:00 AM	0	0	1	4	0	0	3	0	0	0	0	5	84	0	0	0	0	61	1	0	159	580
8:15 AM	0	4	2	4	0	0	2	0	1	0	0	5	63	2	0	0	1	70	1	0	155	0
8:30 AM	0	1	1	5	0	0	0	1	0	0	0	2	65	1	0	0	1	61	2	0	140	0
8:45 AM	0	0	1	3	0	0	2	2	1	0	0	1	56	1	0	0	2	56	1	0	126	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Lights	0	7	6	12	0	0	5	4	2	0	0	13	303	4	0	0	4	262	3	0	625
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	7	0	0	12
Total	0	7	6	12	0	0	5	4	2	0	0	13	309	4	0	0	4	269	3	0	638
Bicycles on Road	0	0	1	1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	5
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.3%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.65					0.47					0.93					0.82			18.96
Peak Hour Factor (PHF)	0.00	0.44	0.75	0.80	0.00	0.00	0.40	0.75	0.50	0.00	0.00	0.65	0.94	0.50	0.00	0.00	0.50	0.81	0.63	0.00	18.96

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	0	1	2	0	0	0	0	0	0	0	1	16	0	0	0	0	14	0	0	34
6:15 AM	0	0	2	2	0	0	0	0	1	0	0	0	18	0	0	0	0	23	1	0	47
6:30 AM	0	1	0	1	0	0	0	0	1	0	0	1	36	0	0	0	0	27	1	0	68
6:45 AM	0	0	0	3	0	0	0	1	0	0	0	1	29	1	0	0	0	46	0	0	81
7:00 AM	0	0	0	2	0	0	1	2	0	0	0	3	48	0	0	0	0	74	2	0	132
7:15 AM	0	1	1	6	0	0	5	2	1	0	0	3	69	1	0	0	0	92	1	0	182
7:30 AM	0	3	1	2	0	0	0	1	1	0	0	3	81	2	0	0	1	68	1	0	164
7:45 AM	0	0	2	2	0	0	0	3	0	0	0	0	78	0	0	0	2	68	0	0	155
8:00 AM	0	0	1	4	0	0	3	0	0	0	0	5	82	0	0	0	0	59	1	0	155
8:15 AM	0	4	2	4	0	0	2	0	1	0	0	5	62	2	0	0	1	67	1	0	151
8:30 AM	0	1	1	5	0	0	0	1	0	0	0	2	64	1	0	0	1	61	2	0	139
8:45 AM	0	0	1	3	0	0	2	2	1	0	0	1	54	1	0	0	2	55	1	0	123
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	0	0	4
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	1	0	1	1	0	1	0	0	0
6:15 AM	1	0	1	0	0	0	1	1	2	1	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	3	2	5	0	0	0	0	1	1
7:00 AM	1	0	1	0	0	0	3	3	6	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	1	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:45 AM	1	4	5	1	0	1	0	0	0	0	0	0

All Traffic Data Services

52 CARLISLE BLVD & GARFIELD AVE Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:00 PM - 12:15 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	1	3	6	0	0	0	1	1	0	0	4	58	0	0	0	0	52	1	0	127	493
11:15 AM	0	1	1	0	0	0	3	1	0	0	0	2	61	0	0	1	1	46	2	0	119	529
11:30 AM	0	0	3	0	0	0	0	1	1	0	0	2	71	0	0	0	0	45	0	0	123	543
11:45 AM	0	3	1	1	0	0	2	0	0	0	0	6	52	1	0	0	1	56	1	0	124	539
12:00 PM	0	1	3	1	0	0	0	0	1	0	0	5	79	0	0	0	1	68	4	0	163	535
12:15 PM	0	2	4	3	0	0	0	0	1	0	0	1	58	0	0	0	1	61	2	0	133	485
12:30 PM	0	1	1	0	0	0	0	0	1	0	0	2	53	1	0	0	1	58	1	0	119	462
12:45 PM	0	0	1	2	0	0	1	0	0	0	0	1	56	0	0	0	1	55	3	0	120	476
1:00 PM	0	3	1	6	0	0	2	0	1	0	0	1	43	0	0	0	1	55	0	0	113	491
1:15 PM	0	1	0	1	0	0	0	3	2	0	0	2	57	0	0	0	0	42	2	0	110	0
1:30 PM	0	0	2	1	0	0	1	3	0	0	0	2	55	0	0	0	0	67	2	0	133	0
1:45 PM	0	2	0	2	0	0	1	3	1	0	0	2	62	0	0	0	1	60	1	0	135	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	3	9	6	0	0	1	0	3	0	0	9	242	0	0	0	4	238	10	0	525
Mediums	0	1	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	4	0	0	10
Total	0	4	9	6	0	0	1	0	3	0	0	9	246	1	0	0	4	242	10	0	535
Bicycles on Road	0	0	2	1	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	9
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.60					0.85					0.83					0.88			19.67
Peak Hour Factor (PHF)	0.00	0.58	0.69	0.46	0.00	0.00	0.42	0.75	0.50	0.00	0.00	0.63	0.83	0.50	0.00	0.25	1.00	0.89	0.63	0.00	19.67

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	1	3	6	0	0	0	1	1	0	0	4	56	0	0	0	0	50	1	0	123
11:15 AM	0	1	1	0	0	0	3	1	0	0	0	2	59	0	0	1	1	44	2	0	115
11:30 AM	0	0	3	0	0	0	0	0	1	0	0	2	70	0	0	0	0	44	0	0	120
11:45 AM	0	3	1	1	0	0	2	0	0	0	0	6	49	1	0	0	1	56	1	0	121
12:00 PM	0	0	3	1	0	0	0	0	1	0	0	5	76	0	0	0	1	67	4	0	158
12:15 PM	0	2	4	3	0	0	0	0	1	0	0	1	58	0	0	0	1	59	2	0	131
12:30 PM	0	1	1	0	0	0	0	0	1	0	0	2	53	0	0	0	1	58	1	0	118
12:45 PM	0	0	1	2	0	0	1	0	0	0	0	1	55	0	0	0	1	54	3	0	118
1:00 PM	0	3	1	6	0	0	2	0	1	0	0	1	43	0	0	0	1	54	0	0	112
1:15 PM	0	1	0	1	0	0	0	3	2	0	0	2	55	0	0	0	0	41	2	0	107
1:30 PM	0	0	2	1	0	0	1	3	0	0	0	1	55	0	0	0	0	65	2	0	130
1:45 PM	0	2	0	2	0	0	1	3	1	0	0	2	60	0	0	0	1	59	1	0	132
Mediums																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	4
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3
12:15 PM	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	1	0	1	1	0	1	1	1	2	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	2	0	2	0	0	0
12:30 PM	0	4	4	1	0	1	0	2	2	0	0	0
12:45 PM	0	0	0	0	0	0	1	0	1	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

52 CARLISLE BLVD & GARFIELD AVE PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
05:00 PM - 05:15 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					CARLISLE BLVD					CARLISLE BLVD						
	Eastbound					Westbound					Northbound					Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	3	2	7	0	0	0	0	2	0	0	3	96	0	0	0	0	72	3	0	188	763
3:45 PM	0	0	6	1	0	0	0	0	1	0	0	6	100	0	0	0	0	68	2	0	184	780
4:00 PM	0	1	1	1	0	0	0	3	0	0	0	6	95	2	0	0	1	96	2	0	208	801
4:15 PM	0	2	2	2	0	0	1	0	1	0	0	7	91	1	0	0	2	69	5	0	183	817
4:30 PM	0	0	3	2	0	0	2	2	2	0	0	9	91	0	0	0	0	93	1	0	205	847
4:45 PM	0	1	5	5	0	0	1	3	0	0	0	4	90	5	0	0	1	90	0	0	205	819
5:00 PM	0	3	1	3	0	0	1	1	0	0	0	4	109	1	0	0	0	99	2	0	224	777
5:15 PM	0	1	4	3	0	0	1	2	2	0	0	8	89	1	0	0	2	95	5	0	213	703
5:30 PM	0	1	4	4	0	0	1	3	0	0	0	5	80	0	0	0	0	76	3	0	177	629
5:45 PM	0	0	1	1	0	0	0	4	0	0	0	5	63	0	0	0	1	84	4	0	163	0
6:00 PM	0	1	1	2	0	0	0	0	0	0	0	4	59	2	0	0	0	81	0	0	150	0
6:15 PM	0	0	2	1	0	0	1	2	2	0	0	4	58	0	0	0	0	66	3	0	139	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	5	13	13	0	0	4	8	4	0	0	25	376	7	0	0	3	376	8	0	842
Mediums	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	1	0	0	5
Total	0	5	13	13	0	0	5	8	4	0	0	25	379	7	0	0	3	377	8	0	847
Bicycles on Road	0	0	1	1	0	0	0	1	0	0	0	4	0	0	0	0	0	1	0	0	8
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.80					0.71					0.90					0.95			19.79
Peak Hour Factor (PHF)	0.00	0.50	0.70	0.75	0.00	0.00	0.63	0.63	0.50	0.00	0.00	0.78	0.96	0.40	0.00	0.00	0.50	0.95	0.70	0.00	19.79

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	3	2	7	0	0	0	0	2	0	0	3	95	0	0	0	0	71	3	0	186
3:45 PM	0	0	6	1	0	0	0	0	1	0	0	6	97	0	0	0	0	68	2	0	181
4:00 PM	0	1	1	1	0	0	0	3	0	0	0	6	92	2	0	0	1	95	2	0	204
4:15 PM	0	2	2	2	0	0	1	0	1	0	0	7	91	1	0	0	2	68	5	0	182
4:30 PM	0	0	3	2	0	0	1	2	2	0	0	9	89	0	0	0	0	93	1	0	202
4:45 PM	0	1	5	5	0	0	1	3	0	0	0	4	89	5	0	0	1	90	0	0	204
5:00 PM	0	3	1	3	0	0	1	1	0	0	0	4	109	1	0	0	0	98	2	0	223
5:15 PM	0	1	4	3	0	0	1	2	2	0	0	8	89	1	0	0	2	95	5	0	213
5:30 PM	0	1	4	4	0	0	1	3	0	0	0	5	80	0	0	0	0	75	3	0	176
5:45 PM	0	0	1	1	0	0	0	4	0	0	0	5	61	0	0	0	1	84	4	0	161
6:00 PM	0	1	1	2	0	0	0	0	0	0	0	4	59	2	0	0	0	79	0	0	148
6:15 PM	0	0	2	1	0	0	1	2	2	0	0	4	58	0	0	0	0	66	3	0	139
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	4
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	4
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3
5:30 PM	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	2	3	1	0	1
4:45 PM	0	0	0	0	0	0	2	0	2	0	0	0
5:00 PM	0	0	0	1	0	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	1	0	1	0	0	0	0	0	0	3	0	3
5:45 PM	2	2	4	0	0	0	0	2	2	0	0	0
6:00 PM	0	0	0	0	0	0	0	2	2	0	1	1
6:15 PM	0	0	0	0	0	0	1	0	1	0	0	0

All Traffic Data Services

53 MORNINGSIDE DR & GARFIELD AVE AM
Wednesday, May 8, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3	10
6:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	14
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	25
6:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4	34
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	7	42
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	5	4	0	0	0	0	1	1	0	12	43
7:30 AM	0	1	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0	0	11	39
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	4	5	0	0	0	0	1	1	0	12	39
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	8	42
8:15 AM	0	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	8	0
8:30 AM	0	0	0	4	0	0	0	0	0	0	0	1	4	0	0	0	0	2	0	0	11	0
8:45 AM	0	1	0	1	0	0	0	0	0	0	0	5	5	0	0	0	0	2	1	0	15	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	1	0	7	0	0	0	0	0	0	0	12	11	0	0	0	0	7	1	0	39
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	7	0	0	0	0	0	0	0	12	11	0	0	0	0	7	1	0	39
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.63					0.00					0.75					0.63			263.85
Peak Hour Factor (PHF)	0.00	0.75	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.70	0.65	0.00	0.00	0.00	0.00	0.50	0.50	0.00	263.85

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
6:00 AM	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
6:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
6:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	4
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	6
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	5	4	0	0	0	0	1	1	0	12
7:30 AM	0	1	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0	0	11
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	4	5	0	0	0	0	1	1	0	12
8:00 AM	0	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	8
8:15 AM	0	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	8
8:30 AM	0	0	0	4	0	0	0	0	0	0	0	1	4	0	0	0	0	2	0	0	11
8:45 AM	0	1	0	1	0	0	0	0	0	0	0	5	5	0	0	0	0	2	1	0	15
Mediums																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	1	0	1	0	0	0	0	0	0	1	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	1
6:45 AM	1	2	3	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
7:15 AM	1	0	1	0	0	0	1	0	1	1	0	1
7:30 AM	0	1	1	0	0	0	1	0	1	1	0	1
7:45 AM	0	1	1	0	3	3	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0
8:15 AM	1	0	1	3	0	3	2	1	3	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	1	0	0	0	0	0	0

All Traffic Data Services

53 MORNINGSIDE DR & GARFIELD AVE Noon
Wednesday, May 8, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:15 PM - 12:30 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	0	3	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	2	0	0	10	30
11:15 AM	0	1	0	1	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	6	28
11:30 AM	0	3	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	7	31
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	7	31
12:00 PM	0	0	0	3	0	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	8	32
12:15 PM	0	1	0	2	0	0	0	0	0	0	0	1	2	0	0	0	0	3	0	0	9	32
12:30 PM	0	2	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	7	37
12:45 PM	0	1	0	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	8	46
1:00 PM	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	3	1	0	8	46
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	4	2	0	14	0
1:30 PM	0	2	0	2	0	0	0	0	0	0	0	4	7	0	0	0	0	0	1	0	16	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	2	0	0	8	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	4	0	8	0	0	0	0	0	0	0	5	7	0	0	0	0	6	1	0	31
Mediums	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	9	0	0	0	0	0	0	0	5	7	0	0	0	0	6	1	0	32
Bicycles on Road	0	0	0	1	0	0	0	0	0	0	0	4	1	0	0	0	0	1	0	0	7
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.81					0.00					0.59					0.54			356.19
Peak Hour Factor (PHF)	0.00	0.58	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.50	0.00	0.00	0.00	0.00	0.56	0.63	0.00	356.19

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	3	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	2	0	0	10
11:15 AM	0	1	0	1	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	6
11:30 AM	0	3	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	7
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	6
12:00 PM	0	0	0	3	0	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	8
12:15 PM	0	1	0	2	0	0	0	0	0	0	0	1	2	0	0	0	0	3	0	0	9
12:30 PM	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	6
12:45 PM	0	1	0	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	8
1:00 PM	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	3	1	0	8
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	4	1	0	13
1:30 PM	0	2	0	2	0	0	0	0	0	0	0	4	7	0	0	0	0	0	1	0	16
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	2	0	0	7
Mediums																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	1	1	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	2	0	2	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	2	0	2
1:15 PM	0	2	2	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	1	0	1	1	0	1	0	0	0
1:45 PM	0	1	1	0	0	0	0	0	0	0	0	0

All Traffic Data Services

53 MORNINGSIDE DR & GARFIELD AVE PM
Wednesday, May 8, 2024

Peak Hour
04:30 PM - 05:30 PM
Peak 15-Minutes
04:30 PM - 04:45 PM

Traffic Counts - All Vehicles

	GARFIELD AVE					GARFIELD AVE					MORNINGSIDE DR					MORNINGSIDE DR						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	0	3	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	4	0	0	12	51
3:45 PM	0	3	0	3	0	0	0	0	0	0	0	1	4	0	0	0	0	4	0	0	15	58
4:00 PM	0	0	0	2	0	0	0	0	0	0	0	3	1	0	0	0	0	2	0	0	8	56
4:15 PM	0	2	0	1	0	0	0	0	0	0	0	3	3	0	0	0	0	4	3	0	16	59
4:30 PM	0	0	0	3	0	0	0	0	0	0	0	4	8	0	0	0	0	4	0	0	19	54
4:45 PM	0	3	0	2	0	0	0	0	0	0	0	5	1	0	0	0	0	2	0	0	13	49
5:00 PM	0	0	0	3	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	11	50
5:15 PM	0	2	0	3	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	11	46
5:30 PM	0	2	0	2	0	0	0	0	0	0	0	2	4	0	0	0	0	3	1	0	14	52
5:45 PM	0	2	0	1	0	0	0	0	0	0	0	8	3	0	0	0	0	0	0	0	14	0
6:00 PM	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	7	0
6:15 PM	0	1	0	2	0	0	0	0	0	0	0	5	5	0	0	0	0	4	0	0	17	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	5	0	11	0	0	0	0	0	0	0	13	15	0	0	0	0	6	2	0	52
Mediums	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Total	0	5	0	11	0	0	0	0	0	0	0	15	15	0	0	0	0	6	2	0	54
Bicycles on Road	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.0%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.85					0.00					0.67					0.61			233.34
Peak Hour Factor (PHF)	0.00	0.67	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.50	0.00	0.00	0.00	0.00	0.88	0.50	0.00	233.34

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	3	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	4	0	0	12
3:45 PM	0	3	0	3	0	0	0	0	0	0	0	1	4	0	0	0	0	4	0	0	15
4:00 PM	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	7
4:15 PM	0	2	0	1	0	0	0	0	0	0	0	3	3	0	0	0	0	4	3	0	16
4:30 PM	0	0	0	3	0	0	0	0	0	0	0	2	8	0	0	0	0	4	0	0	17
4:45 PM	0	3	0	2	0	0	0	0	0	0	0	5	1	0	0	0	0	2	0	0	13
5:00 PM	0	0	0	3	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	11
5:15 PM	0	2	0	3	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	11
5:30 PM	0	2	0	2	0	0	0	0	0	0	0	2	4	0	0	0	0	3	1	0	14
5:45 PM	0	2	0	1	0	0	0	0	0	0	0	8	3	0	0	0	0	0	0	0	14
6:00 PM	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	7
6:15 PM	0	1	0	2	0	0	0	0	0	0	0	5	5	0	0	0	0	4	0	0	17
Mediums																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	1	2	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0	0	0	1	1
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	2	2	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	2	0	2	0	0	0	1	0	1	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

54 UNIVERSITY BLVD & LOMAS BLVD AM
Thursday, May 9, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	LOMAS BLVD					LOMAS BLVD					UNIVERSITY BLVD					UNIVERSITY BLVD						
	Eastbound					Westbound					Northbound					Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	1	40	80	7	0	0	3	35	21	0	0	2	12	5	0	0	19	18	12	0	255	1,510
6:15 AM	0	60	107	4	0	0	9	43	21	0	1	4	27	11	0	0	19	13	10	0	329	1,762
6:30 AM	0	55	133	9	0	0	18	53	32	0	0	2	43	8	0	0	20	30	8	0	411	2,075
6:45 AM	0	61	178	10	0	0	16	66	37	0	0	9	35	15	0	0	29	43	16	0	515	2,497
7:00 AM	0	57	185	12	0	0	25	67	22	0	0	6	36	15	0	0	25	39	18	0	507	2,829
7:15 AM	0	67	221	28	0	0	24	89	33	0	0	10	52	18	0	0	30	52	18	0	642	3,141
7:30 AM	0	47	233	20	0	0	49	205	46	0	0	18	71	19	0	0	31	72	22	0	833	3,276
7:45 AM	0	60	220	36	0	0	41	159	59	0	0	12	75	28	0	0	39	81	37	0	847	3,258
8:00 AM	0	56	221	19	0	0	32	166	41	0	0	15	87	26	0	0	41	89	26	0	819	3,255
8:15 AM	0	62	217	24	0	0	25	143	32	0	0	23	80	25	0	0	36	73	37	0	777	0
8:30 AM	0	56	228	33	0	0	29	143	29	0	0	23	75	47	0	0	42	80	30	0	815	0
8:45 AM	0	60	250	30	0	0	28	153	33	0	0	20	83	43	0	0	43	67	34	0	844	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	0	1	0	0	2	0	0	0	0	0	2	1	0	7
Lights	0	220	877	98	0	0	140	660	164	0	0	64	301	96	0	0	132	299	118	0	3,169
Mediums	0	5	13	1	0	0	7	13	13	0	0	2	12	2	0	0	15	14	3	0	100
Total	0	225	891	99	0	0	147	673	178	0	0	68	313	98	0	0	147	315	122	0	3,276
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.1%					0.1%					0.4%					0.5%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.8%	0.0%	0.2%
Peak Hour Factor (PHF)			0.92					0.83					0.94					0.97			0.97
Peak Hour Factor (PHF)	0.25	0.90	0.92	0.78	0.00	0.00	0.75	0.82	0.76	0.00	0.25	0.88	0.93	0.75	0.00	0.00	0.94	0.91	0.88	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
6:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Lights																					
6:00 AM	1	39	77	7	0	0	3	33	13	0	0	2	12	5	0	0	13	18	12	0	235
6:15 AM	0	59	106	4	0	0	8	42	14	0	1	4	27	11	0	0	12	13	10	0	311
6:30 AM	0	55	129	9	0	0	18	50	24	0	0	2	39	8	0	0	11	26	8	0	379
6:45 AM	0	61	174	9	0	0	16	64	30	0	0	9	34	15	0	0	24	40	16	0	492
7:00 AM	0	55	182	12	0	0	25	64	16	0	0	6	34	13	0	0	18	36	18	0	479
7:15 AM	0	66	218	27	0	0	23	88	29	0	0	10	51	18	0	0	26	50	15	0	621
7:30 AM	0	46	230	20	0	0	48	201	43	0	0	18	70	18	0	0	28	68	21	0	811
7:45 AM	0	58	217	36	0	0	40	158	54	0	0	11	71	27	0	0	36	80	36	0	824
8:00 AM	0	55	217	18	0	0	31	161	40	0	0	13	82	26	0	0	36	82	26	0	787
8:15 AM	0	61	213	24	0	0	21	140	27	0	0	22	78	25	0	0	32	69	35	0	747
8:30 AM	0	52	223	31	0	0	28	139	26	0	0	23	72	47	0	0	40	73	30	0	784
8:45 AM	0	58	245	28	0	0	27	148	29	0	0	20	81	42	0	0	38	61	32	0	809
Mediums																					
6:00 AM	0	1	3	0	0	0	0	2	8	0	0	0	0	0	0	0	6	0	0	0	20
6:15 AM	0	1	1	0	0	0	0	1	7	0	0	0	0	0	0	0	7	0	0	0	17
6:30 AM	0	0	3	0	0	0	0	3	8	0	0	0	4	0	0	0	9	3	0	0	30
6:45 AM	0	0	3	1	0	0	0	2	7	0	0	0	1	0	0	0	5	3	0	0	22
7:00 AM	0	2	3	0	0	0	0	3	6	0	0	0	2	2	0	0	7	3	0	0	28
7:15 AM	0	1	2	1	0	0	1	1	4	0	0	0	1	0	0	0	4	2	3	0	20
7:30 AM	0	1	3	0	0	0	1	4	3	0	0	0	1	1	0	0	3	4	1	0	22
7:45 AM	0	2	2	0	0	0	1	1	4	0	0	0	4	1	0	0	3	1	1	0	20
8:00 AM	0	1	4	1	0	0	1	5	1	0	0	1	5	0	0	0	5	5	0	0	29
8:15 AM	0	1	4	0	0	0	4	3	5	0	0	1	2	0	0	0	4	4	1	0	29
8:30 AM	0	3	5	2	0	0	1	4	3	0	0	0	2	0	0	0	2	6	0	0	28
8:45 AM	0	1	5	2	0	0	1	5	4	0	0	0	2	0	0	0	5	6	2	0	33
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	1	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	1	0	1	1	0	1	1	0	1	0	0	0
7:00 AM	0	0	0	0	1	1	0	0	0	1	0	1
7:15 AM	0	0	0	0	1	1	0	0	0	0	1	1
7:30 AM	0	1	1	0	0	0	3	0	3	0	1	1
7:45 AM	0	0	0	0	1	1	8	0	8	0	0	0
8:00 AM	0	1	1	0	3	3	4	0	4	0	0	0
8:15 AM	0	0	0	1	0	1	2	0	2	0	0	0
8:30 AM	0	0	0	1	0	1	2	0	2	1	0	1
8:45 AM	1	0	1	0	0	0	1	1	2	0	0	0

All Traffic Data Services

54 UNIVERSITY BLVD & LOMAS BLVD Noon
Thursday, May 9, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:45 PM - 01:00 PM

Traffic Counts - All Vehicles

	LOMAS BLVD Eastbound					LOMAS BLVD Westbound					UNIVERSITY BLVD Northbound					UNIVERSITY BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
11:00 AM	0	44	199	29	0	1	35	129	33	0	0	17	67	37	0	0	50	74	47	0	762	3,072
11:15 AM	0	39	179	27	0	0	37	114	29	0	0	25	54	38	0	0	36	73	37	0	688	3,152
11:30 AM	0	42	197	28	0	0	37	139	40	0	0	21	84	44	0	0	42	88	48	0	810	3,266
11:45 AM	0	44	207	21	0	1	34	134	28	0	0	27	82	43	0	0	59	90	42	0	812	3,320
12:00 PM	0	40	213	30	0	2	32	132	33	0	0	24	100	59	0	0	46	87	44	0	842	3,413
12:15 PM	0	46	224	35	0	1	26	115	42	0	0	28	88	51	0	0	34	77	35	0	802	3,402
12:30 PM	0	49	239	35	0	0	23	140	43	0	0	31	87	46	0	0	42	80	49	0	864	3,371
12:45 PM	0	51	246	33	0	0	36	196	41	0	0	29	75	47	0	0	48	64	39	0	905	3,326
1:00 PM	0	45	251	35	0	0	25	153	35	0	0	24	73	33	0	0	29	80	48	0	831	3,144
1:15 PM	0	38	169	26	0	0	34	134	39	0	0	23	65	51	0	0	53	98	41	0	771	0
1:30 PM	0	38	199	29	0	0	36	150	47	0	0	31	72	42	0	0	37	87	51	0	819	0
1:45 PM	0	36	179	19	0	0	37	138	39	0	0	27	59	28	0	0	43	80	38	0	723	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	2	0	0	0	0	2	0	0	0	1	0	0	0	0	1	1	0	0	7
Lights	0	178	904	127	0	3	115	566	144	0	0	110	339	200	0	0	155	297	161	0	3,299
Mediums	0	8	16	6	0	0	2	15	15	0	0	1	11	3	0	0	14	10	6	0	107
Total	0	186	922	133	0	3	117	583	159	0	0	112	350	203	0	0	170	308	167	0	3,413
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					1					0			1
Heavy Vehicle Percentage			0.2%					0.2%					0.2%					0.3%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.97					0.85					0.91					0.91			0.94
Peak Hour Factor (PHF)	0.00	0.94	0.96	0.99	0.00	0.50	0.97	0.81	0.86	0.00	0.00	0.90	0.89	0.86	0.00	0.00	0.79	0.88	0.88	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
1:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
11:00 AM	0	43	196	29	0	1	35	124	28	0	0	16	65	37	0	0	45	69	43	0	731
11:15 AM	0	37	176	27	0	0	36	111	25	0	0	24	49	38	0	0	34	70	35	0	662
11:30 AM	0	42	194	26	0	0	35	134	35	0	0	21	80	44	0	0	35	83	46	0	775
11:45 AM	0	41	203	20	0	1	34	129	25	0	0	27	76	42	0	0	54	85	41	0	778
12:00 PM	0	39	205	27	0	2	32	128	29	0	0	24	97	58	0	0	41	85	41	0	808
12:15 PM	0	46	221	34	0	1	26	113	40	0	0	28	84	51	0	0	32	74	34	0	784
12:30 PM	0	47	237	34	0	0	23	135	36	0	0	29	84	44	0	0	38	76	49	0	832
12:45 PM	0	46	241	32	0	0	34	190	39	0	0	29	74	47	0	0	44	62	37	0	875
1:00 PM	0	42	246	34	0	0	25	149	32	0	0	23	71	31	0	0	27	76	44	0	800
1:15 PM	0	36	163	24	0	0	34	131	37	0	0	23	62	50	0	0	51	96	37	0	744
1:30 PM	0	37	190	28	0	0	36	142	45	0	0	31	67	42	0	0	33	86	50	0	787
1:45 PM	0	35	177	17	0	0	37	137	35	0	0	27	57	28	0	0	38	72	37	0	697
Mediums																					
11:00 AM	0	1	3	0	0	0	0	5	5	0	0	1	2	0	0	0	4	5	3	0	29
11:15 AM	0	2	3	0	0	0	1	3	4	0	0	1	4	0	0	0	2	3	2	0	25
11:30 AM	0	0	3	2	0	0	2	5	5	0	0	0	4	0	0	0	7	5	2	0	35
11:45 AM	0	3	4	1	0	0	0	5	3	0	0	0	6	1	0	0	5	5	1	0	34
12:00 PM	0	1	7	3	0	0	0	4	4	0	0	0	3	1	0	0	5	2	3	0	33
12:15 PM	0	0	3	1	0	0	0	1	2	0	0	0	4	0	0	0	2	3	1	0	17
12:30 PM	0	2	1	1	0	0	0	5	7	0	0	1	3	2	0	0	4	4	0	0	30
12:45 PM	0	5	5	1	0	0	2	5	2	0	0	0	1	0	0	0	3	1	2	0	27
1:00 PM	0	3	5	1	0	0	0	4	3	0	0	1	1	2	0	0	2	3	4	0	29
1:15 PM	0	2	5	1	0	0	0	3	2	0	0	0	3	1	0	0	2	2	3	0	24
1:30 PM	0	1	9	1	0	0	0	6	2	0	0	0	5	0	0	0	4	1	1	0	30
1:45 PM	0	1	2	2	0	0	0	1	4	0	0	0	2	0	0	0	5	8	1	0	26
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	1	0	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	2	2	1	0	1	0	1	1
11:15 AM	0	0	0	1	0	1	3	0	3	0	0	0
11:30 AM	1	0	1	0	1	1	1	1	2	0	0	0
11:45 AM	0	0	0	1	2	3	0	1	1	0	0	0
12:00 PM	0	0	0	1	0	1	2	1	3	0	0	0
12:15 PM	1	0	1	0	0	0	0	2	2	0	0	0
12:30 PM	0	1	1	1	1	2	0	1	1	0	1	1
12:45 PM	0	0	0	1	0	1	4	1	5	0	0	0
1:00 PM	0	2	2	0	2	2	0	1	1	0	3	3
1:15 PM	0	0	0	0	3	3	1	1	2	0	0	0
1:30 PM	0	1	1	1	0	1	2	3	5	0	5	5
1:45 PM	0	0	0	2	0	2	0	0	0	0	0	0

All Traffic Data Services

54 UNIVERSITY BLVD & LOMAS BLVD PM
Thursday, May 9, 2024

Peak Hour
03:45 PM - 04:45 PM
Peak 15-Minutes
03:45 PM - 04:00 PM

Traffic Counts - All Vehicles

	LOMAS BLVD Eastbound					LOMAS BLVD Westbound					UNIVERSITY BLVD Northbound					UNIVERSITY BLVD Southbound						
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Rolling Hour
3:30 PM	0	31	163	29	0	0	52	190	33	0	0	31	90	58	0	0	43	104	67	0	891	3,756
3:45 PM	1	34	262	21	0	0	50	207	37	0	0	26	95	55	0	0	36	121	43	0	988	3,839
4:00 PM	0	32	225	29	0	0	36	178	38	0	0	40	92	45	0	1	47	111	65	0	939	3,773
4:15 PM	0	35	231	21	0	0	44	227	37	0	0	34	71	48	0	0	34	100	56	0	938	3,811
4:30 PM	0	31	204	38	0	0	41	216	40	0	0	30	90	36	0	0	49	119	80	0	974	3,828
4:45 PM	0	34	209	28	0	1	41	233	51	0	0	33	75	34	0	0	39	96	48	0	922	3,778
5:00 PM	0	28	191	24	0	0	39	198	48	0	0	42	115	52	0	0	41	145	54	0	977	3,721
5:15 PM	1	25	241	40	0	0	41	219	43	0	0	32	84	47	0	0	42	103	37	0	955	3,391
5:30 PM	0	33	191	21	0	0	35	203	33	0	0	35	86	51	0	0	45	135	56	0	924	3,095
5:45 PM	0	25	243	25	0	0	34	184	39	0	0	29	92	49	0	0	30	91	24	0	865	0
6:00 PM	0	15	137	29	0	0	24	133	31	0	0	23	93	44	0	0	21	67	30	0	647	0
6:15 PM	1	21	197	21	0	1	30	137	30	0	0	12	65	36	0	0	24	57	27	0	659	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	1	130	906	106	0	0	170	819	138	0	0	129	341	183	0	1	154	445	241	0	3,764
Mediums	0	1	16	3	0	0	1	9	14	0	0	1	7	1	0	0	12	6	3	0	74
Total	1	132	922	109	0	0	171	828	152	0	0	130	348	184	0	1	166	451	244	0	3,839
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			1					0					0					0			1
Heavy Vehicle Percentage			0.1%					0.0%					0.0%					0.0%			0.0%
Heavy Vehicle Percentage	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor (PHF)			0.92					0.93					0.85					0.87			0.97
Peak Hour Factor (PHF)	0.25	0.94	0.88	0.81	0.00	0.25	0.88	0.94	0.89	0.00	0.00	0.85	0.82	0.89	0.00	0.25	0.87	0.83	0.78	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	0	30	160	28	0	0	52	187	32	0	0	30	90	58	0	0	40	101	66	0	874
3:45 PM	1	34	256	21	0	0	50	205	34	0	0	26	92	55	0	0	36	120	43	0	973
4:00 PM	0	30	222	29	0	0	36	175	35	0	0	39	91	45	0	1	43	108	63	0	917
4:15 PM	0	35	226	20	0	0	44	224	33	0	0	34	69	47	0	0	31	98	56	0	917
4:30 PM	0	31	202	36	0	0	40	215	36	0	0	30	89	36	0	0	44	119	79	0	957
4:45 PM	0	34	202	28	0	1	39	231	49	0	0	31	72	34	0	0	36	93	47	0	897
5:00 PM	0	27	189	24	0	0	38	195	44	0	0	42	113	52	0	0	37	142	54	0	957
5:15 PM	1	23	236	40	0	0	38	218	39	0	0	32	81	47	0	0	39	103	37	0	934
5:30 PM	0	33	189	21	0	0	34	200	31	0	0	34	83	50	0	0	42	132	56	0	905
5:45 PM	0	24	237	25	0	0	34	183	36	0	0	28	90	49	0	0	29	91	23	0	849
6:00 PM	0	15	137	29	0	0	24	132	27	0	0	23	92	44	0	0	18	66	30	0	637
6:15 PM	1	20	194	21	0	0	30	131	28	0	0	12	62	36	0	0	22	56	27	0	640
Mediums																					
3:30 PM	0	1	3	1	0	0	0	2	1	0	0	1	0	0	0	0	3	3	1	0	16
3:45 PM	0	0	6	0	0	0	0	2	3	0	0	0	3	0	0	0	0	1	0	0	15
4:00 PM	0	1	3	0	0	0	0	3	3	0	0	1	1	0	0	0	4	3	2	0	21
4:15 PM	0	0	5	1	0	0	0	3	4	0	0	0	2	1	0	0	3	2	0	0	21
4:30 PM	0	0	2	2	0	0	1	1	4	0	0	0	1	0	0	0	5	0	1	0	17
4:45 PM	0	0	7	0	0	0	2	2	2	0	0	2	3	0	0	0	3	3	0	0	24
5:00 PM	0	1	2	0	0	0	1	3	4	0	0	0	2	0	0	0	4	3	0	0	20
5:15 PM	0	2	5	0	0	0	3	0	4	0	0	0	3	0	0	0	3	0	0	0	20
5:30 PM	0	0	1	0	0	0	1	3	2	0	0	1	3	1	0	0	3	3	0	0	18
5:45 PM	0	1	6	0	0	0	0	1	3	0	0	1	2	0	0	0	1	0	1	0	16
6:00 PM	0	0	0	0	0	0	0	1	4	0	0	0	1	0	0	0	3	1	0	0	10
6:15 PM	0	1	3	0	0	1	0	6	2	0	0	0	3	0	0	0	2	1	0	0	19
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	1	1	2	1	1	2	0	1	1	2	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1	2	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	1	3	4	2	4	6	0	0	0
3:45 PM	1	0	1	2	0	2	1	2	3	1	0	1
4:00 PM	0	0	0	0	0	0	0	3	3	0	1	1
4:15 PM	0	1	1	1	0	1	0	0	0	0	1	1
4:30 PM	1	1	2	2	1	3	0	8	8	3	0	3
4:45 PM	2	0	2	0	0	0	0	0	0	1	0	1
5:00 PM	1	0	1	2	0	2	0	5	5	0	0	0
5:15 PM	1	0	1	1	0	1	2	5	7	0	0	0
5:30 PM	2	0	2	0	0	0	0	1	1	0	0	0
5:45 PM	0	0	0	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	1	1	0	1	0	0	0
6:15 PM	0	0	0	1	1	2	0	0	0	0	0	0

All Traffic Data Services

55 UNIVERSITY BLVD & GIBSON BLVD AM
Tuesday, May 7, 2024

Peak Hour
07:30 AM - 08:30 AM
Peak 15-Minutes
07:45 AM - 08:00 AM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					UNIVERSITY BLVD Northbound					UNIVERSITY BLVD Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
6:00 AM	0	4	350	5	0	2	4	99	2	0	0	16	1	3	0	0	5	2	6	0	499	2,823
6:15 AM	0	7	420	17	0	1	4	119	2	0	0	27	1	12	0	1	13	4	12	0	640	3,125
6:30 AM	2	11	520	15	0	1	4	198	6	0	0	26	0	14	0	1	12	2	15	0	827	3,300
6:45 AM	1	16	539	17	0	3	4	180	2	0	0	28	8	15	0	1	17	6	20	0	857	3,466
7:00 AM	0	17	496	25	0	0	3	171	11	0	0	16	6	11	0	0	27	5	13	0	801	3,663
7:15 AM	0	25	481	19	0	1	7	177	13	0	0	33	3	7	0	0	24	7	18	0	815	3,915
7:30 AM	2	45	510	29	0	1	9	261	28	0	0	38	5	13	0	1	22	5	24	0	993	3,981
7:45 AM	3	79	539	20	0	2	10	205	33	0	0	49	17	23	0	3	36	8	27	0	1,054	3,725
8:00 AM	1	73	503	32	0	3	22	242	45	0	0	26	27	14	0	3	27	10	25	0	1,053	3,411
8:15 AM	1	36	437	19	0	2	10	211	27	0	0	39	20	16	0	3	24	11	25	0	881	0
8:30 AM	1	17	362	15	0	0	6	228	15	0	0	25	8	10	0	2	29	6	13	0	737	0
8:45 AM	1	21	379	21	0	1	13	182	12	0	0	27	15	12	0	1	24	9	22	0	740	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	12	0	0	0	0	11	0	0	0	0	0	1	0	0	0	0	1	0	25
Lights	7	227	1,946	99	0	8	48	887	124	0	0	150	67	63	0	10	107	32	98	0	3,873
Mediums	0	6	31	1	0	0	3	21	9	0	0	2	2	2	0	0	2	2	2	0	83
Total	7	233	1,989	100	0	8	51	919	133	0	0	152	69	66	0	10	109	34	101	0	3,981
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.5%					1.0%					0.3%					0.4%			0.6%
Heavy Vehicle Percentage	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.6%
Peak Hour Factor (PHF)			0.92					0.89					0.81					0.86			0.94
Peak Hour Factor (PHF)	0.58	0.74	0.94	0.78	0.00	0.67	0.58	0.88	0.74	0.00	0.00	0.78	0.67	0.72	0.00	0.92	0.81	0.82	0.94	0.00	0.94

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	8	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	10
6:45 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	5
8:15 AM	0	0	1	0	0	0	0	7	0	0	0	0	0	1	0	0	0	0	0	0	9
8:30 AM	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
8:45 AM	0	0	2	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	9
Lights																					
6:00 AM	0	4	348	5	0	2	4	97	2	0	0	16	1	3	0	0	5	2	6	0	495
6:15 AM	0	7	415	17	0	1	4	116	2	0	0	26	1	12	0	1	12	4	12	0	630
6:30 AM	2	11	509	15	0	1	4	192	6	0	0	23	0	14	0	1	11	2	15	0	806
6:45 AM	1	15	534	17	0	3	4	171	1	0	0	27	8	15	0	1	15	6	20	0	838
7:00 AM	0	16	489	25	0	0	3	164	11	0	0	16	6	11	0	0	26	5	12	0	784
7:15 AM	0	23	470	19	0	1	7	170	13	0	0	33	3	7	0	0	23	7	18	0	794
7:30 AM	2	44	494	28	0	1	9	254	24	0	0	38	5	13	0	1	21	5	23	0	962
7:45 AM	3	77	528	20	0	2	9	199	32	0	0	48	16	22	0	3	36	8	27	0	1030
8:00 AM	1	71	494	32	0	3	21	237	44	0	0	25	27	14	0	3	26	9	23	0	1030
8:15 AM	1	35	430	19	0	2	9	197	24	0	0	39	19	14	0	3	24	10	25	0	851
8:30 AM	1	17	355	15	0	0	6	220	15	0	0	24	8	10	0	2	29	6	12	0	720
8:45 AM	1	20	363	21	0	1	11	167	12	0	0	26	14	11	0	1	23	9	21	0	701
Mediums																					
6:00 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 AM	0	0	3	0	0	0	0	3	0	0	0	1	0	0	0	0	1	0	0	0	8
6:30 AM	0	0	3	0	0	0	0	5	0	0	0	2	0	0	0	0	1	0	0	0	11
6:45 AM	0	1	4	0	0	0	0	8	1	0	0	1	0	0	0	0	2	0	0	0	17
7:00 AM	0	1	3	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	1	0	13
7:15 AM	0	2	8	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	16
7:30 AM	0	1	11	1	0	0	0	6	4	0	0	0	0	0	0	0	1	0	1	0	25
7:45 AM	0	2	7	0	0	0	1	5	1	0	0	1	1	1	0	0	0	0	0	0	19
8:00 AM	0	2	7	0	0	0	1	3	1	0	0	1	0	0	0	0	1	1	1	0	18
8:15 AM	0	1	6	0	0	0	1	7	3	0	0	0	1	1	0	0	0	1	0	0	21
8:30 AM	0	0	4	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	1	0	11
8:45 AM	0	1	14	0	0	0	1	9	0	0	0	1	1	1	0	0	1	0	1	0	30
Bicycles on Road																					
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	0	1	1	0	1	0	0	0
6:30 AM	0	0	0	2	0	2	0	0	0	1	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	2	0	0	0	0	1	1	0	2	2
7:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	2	0	0	0	1	0	1
8:00 AM	0	0	0	2	0	2	0	0	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	1	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0

All Traffic Data Services

55 UNIVERSITY BLVD & GIBSON BLVD Noon
Tuesday, May 7, 2024

Peak Hour
12:00 PM - 01:00 PM
Peak 15-Minutes
12:30 PM - 12:45 PM

Traffic Counts - All Vehicles

	GIBSON BLVD Eastbound					GIBSON BLVD Westbound					UNIVERSITY BLVD Northbound					UNIVERSITY BLVD Southbound						Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
11:00 AM	2	22	200	26	0	2	20	202	22	0	0	25	11	15	0	4	23	17	27	0	618	2,598
11:15 AM	0	16	190	25	0	0	22	218	17	0	0	37	27	18	0	4	26	18	21	0	639	2,739
11:30 AM	1	19	182	29	0	2	9	223	25	0	0	33	21	20	0	9	32	17	20	0	642	2,889
11:45 AM	1	30	192	35	0	4	31	227	22	0	0	37	18	22	0	8	27	24	21	0	699	3,052
12:00 PM	0	35	216	34	0	3	29	232	31	0	0	42	20	21	0	5	40	25	26	0	759	3,061
12:15 PM	2	40	212	41	0	2	26	245	27	0	0	46	29	23	0	11	35	20	30	0	789	2,977
12:30 PM	1	26	235	30	0	2	27	282	23	0	0	43	26	30	0	6	28	15	31	0	805	2,858
12:45 PM	0	29	202	27	0	1	18	252	25	0	0	46	17	13	0	6	31	15	26	0	708	2,769
1:00 PM	0	35	182	25	0	6	19	248	24	0	0	39	9	17	0	6	36	14	15	0	675	2,797
1:15 PM	1	30	182	29	0	6	21	249	13	0	0	39	19	11	0	2	22	15	31	0	670	0
1:30 PM	0	15	205	35	0	2	16	276	11	0	0	39	19	23	0	7	40	11	17	0	716	0
1:45 PM	2	24	208	27	0	4	24	275	25	0	0	30	14	17	0	4	47	10	25	0	736	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	1	7	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	17
Lights	3	127	844	131	0	8	99	973	99	0	0	177	92	87	0	28	128	75	111	0	2,982
Mediums	0	2	14	1	0	0	1	29	7	0	0	0	0	0	0	0	6	0	2	0	62
Total	3	130	865	132	0	8	100	1,011	106	0	0	177	92	87	0	28	134	75	113	0	3,061
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Bicycles on Crosswalk			0					0					0					0			0
Heavy Vehicle Percentage			0.7%					0.7%					0.0%					0.0%			0.6%
Heavy Vehicle Percentage	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Peak Hour Factor (PHF)			0.96					0.92					0.90					0.92			0.95
Peak Hour Factor (PHF)	0.50	0.82	0.92	0.85	0.00	0.75	0.91	0.95	0.85	0.00	0.00	0.96	0.80	0.80	0.00	0.75	0.77	0.86	0.91	0.00	0.95

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
11:00 AM	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
11:15 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	4
11:30 AM	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
11:45 AM	0	0	1	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	7
12:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
12:30 PM	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
12:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
1:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights																					
11:00 AM	2	20	193	26	0	2	20	193	22	0	0	25	11	15	0	4	21	17	27	0	598
11:15 AM	0	16	184	25	0	0	22	212	17	0	0	35	27	18	0	4	24	18	18	0	620
11:30 AM	1	19	178	29	0	2	9	215	24	0	0	33	21	20	0	9	30	17	20	0	627
11:45 AM	1	30	186	35	0	4	31	218	21	0	0	37	18	22	0	8	27	24	21	0	683
12:00 PM	0	34	214	34	0	3	29	224	29	0	0	42	20	21	0	5	37	25	26	0	743
12:15 PM	2	39	206	41	0	2	26	238	26	0	0	46	29	23	0	11	33	20	29	0	771
12:30 PM	1	26	228	30	0	2	26	275	22	0	0	43	26	30	0	6	28	15	31	0	789
12:45 PM	0	28	196	26	0	1	18	236	22	0	0	46	17	13	0	6	30	15	25	0	679
1:00 PM	0	35	176	25	0	6	19	240	21	0	0	39	9	17	0	6	35	14	14	0	656
1:15 PM	1	30	174	29	0	6	21	244	12	0	0	39	19	11	0	2	22	15	28	0	653
1:30 PM	0	14	199	35	0	2	16	270	11	0	0	39	19	23	0	7	38	11	15	0	699
1:45 PM	2	24	205	26	0	4	24	269	24	0	0	30	14	17	0	4	46	10	23	0	722
Mediums																					
11:00 AM	0	2	2	0	0	0	0	6	0	0	0	0	0	0	0	0	2	0	0	0	12
11:15 AM	0	0	5	0	0	0	0	4	0	0	0	2	0	0	0	0	2	0	2	0	15
11:30 AM	0	0	2	0	0	0	0	4	1	0	0	0	0	0	0	0	2	0	0	0	9
11:45 AM	0	0	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
12:00 PM	0	1	2	0	0	0	0	5	2	0	0	0	0	0	0	0	3	0	0	0	13
12:15 PM	0	0	4	0	0	0	0	5	1	0	0	0	0	0	0	0	2	0	1	0	13
12:30 PM	0	0	3	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	10
12:45 PM	0	1	5	1	0	0	0	14	3	0	0	0	0	0	0	0	1	0	1	0	26
1:00 PM	0	0	6	0	0	0	0	7	3	0	0	0	0	0	0	0	1	0	1	0	18
1:15 PM	0	0	4	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	3	0	12
1:30 PM	0	1	6	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	1	0	14
1:45 PM	0	0	1	1	0	0	0	6	1	0	0	0	0	0	0	0	1	0	2	0	12
Bicycles on Road																					
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	1	0	1	0	0	0	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	1	1	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	1	0	1	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	1	0	1	1	0	1	1	0	1	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	1	0	0	0	0	1	1	1	0	1

All Traffic Data Services

55 UNIVERSITY BLVD & GIBSON BLVD PM
Tuesday, May 7, 2024

Peak Hour
03:30 PM - 04:30 PM
Peak 25-Minutes
03:45 PM - 04:00 PM

Traffic Counts - All Vehicles

	GIBSON BLVD					GIBSON BLVD					UNIVERSITY BLVD					UNIVERSITY BLVD					
	Eastbound					Westbound					Northbound					Southbound					Rolling
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total	Hour
3:30 PM	2	34	255	24	0	2	20	517	27	0	0	57	16	23	0	8	29	13	37	0	1,064	4,341
3:45 PM	2	47	289	27	0	1	22	505	55	0	0	42	24	15	0	2	36	17	34	0	1,120	4,186
4:00 PM	3	42	278	28	0	3	28	514	52	0	0	31	20	12	0	8	30	14	39	0	1,102	4,047
4:15 PM	1	47	285	43	0	1	18	477	50	0	0	35	18	13	0	3	19	19	26	0	1,055	3,940
4:30 PM	1	27	199	27	0	2	14	470	40	0	0	37	15	12	0	3	22	15	27	0	911	3,765
4:45 PM	2	33	200	26	0	2	18	521	28	0	0	38	15	14	0	4	26	25	27	0	979	3,579
5:00 PM	0	27	210	42	0	0	14	527	20	0	0	42	19	13	0	5	27	12	37	0	995	3,397
5:15 PM	0	43	213	34	0	3	28	398	23	0	0	34	14	12	0	7	23	13	35	0	880	3,156
5:30 PM	1	29	178	38	0	0	17	324	16	0	0	41	17	12	0	9	13	7	23	0	725	2,944
5:45 PM	1	40	190	48	0	0	22	324	17	0	0	45	12	16	0	6	32	13	31	0	797	0
6:00 PM	2	24	179	25	0	5	19	348	19	0	0	41	11	16	0	3	28	8	26	0	754	0
6:15 PM	0	29	143	34	0	3	21	290	18	0	0	35	15	18	0	7	18	12	25	0	668	0

Peak Rolling Hour Flow Rates

	Eastbound					Westbound					Northbound					Southbound					
Vehicle Type	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks	0	0	1	0	0	0	0	4	1	0	0	0	1	0	0	0	0	0	0	0	7
Lights	8	169	1,092	122	0	7	86	1,990	179	0	0	165	76	60	0	21	113	62	132	0	4,282
Mediums	0	1	14	0	0	0	2	19	4	0	0	0	1	3	0	0	3	1	4	0	52
Total	8	170	1,107	122	0	7	88	2,013	184	0	0	165	78	63	0	21	116	63	136	0	4,341
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
Bicycles on Crosswalk			1					1					0					2			4
Heavy Vehicle Percentage			0.1%					0.2%					0.3%					0.0%			0.2%
Heavy Vehicle Percentage	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor (PHF)			0.94					0.96					0.80					0.92			0.97
Peak Hour Factor (PHF)	0.67	0.90	0.96	0.84	0.00	0.40	0.79	0.97	0.90	0.00	0.00	0.72	0.81	0.68	0.00	0.75	0.76	0.73	0.87	0.00	0.97

Traffic Counts by Vehicle Type

	Eastbound					Westbound					Northbound					Southbound					
Time	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	U-Turn	Left	Thru	Right	RTOR	Total
Articulated Trucks																					
3:30 PM	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	4
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights																					
3:30 PM	2	34	253	24	0	2	20	512	26	0	0	57	16	22	0	8	29	12	37	0	1054
3:45 PM	2	47	287	27	0	1	22	497	53	0	0	42	24	14	0	2	36	17	32	0	1103
4:00 PM	3	41	271	28	0	3	27	506	52	0	0	31	18	11	0	8	30	14	37	0	1080
4:15 PM	1	47	281	43	0	1	17	475	48	0	0	35	18	13	0	3	18	19	26	0	1045
4:30 PM	1	27	195	27	0	2	13	466	38	0	0	37	15	11	0	3	22	15	27	0	899
4:45 PM	2	33	200	26	0	2	17	516	28	0	0	38	14	14	0	4	25	25	27	0	971
5:00 PM	0	26	208	42	0	0	14	525	20	0	0	42	19	13	0	5	27	12	37	0	990
5:15 PM	0	43	211	34	0	3	28	395	22	0	0	34	14	12	0	7	23	13	34	0	873
5:30 PM	1	28	176	38	0	0	17	323	15	0	0	41	17	12	0	9	13	7	23	0	720
5:45 PM	1	40	188	48	0	0	22	324	17	0	0	45	12	15	0	6	31	12	30	0	791
6:00 PM	2	24	178	25	0	5	19	344	18	0	0	41	10	16	0	2	28	8	26	0	746
6:15 PM	0	29	141	34	0	3	21	285	18	0	0	34	15	18	0	7	18	12	25	0	660
Mediums																					
3:30 PM	0	0	1	0	0	0	0	3	0	0	0	0	0	1	0	0	0	1	0	0	6
3:45 PM	0	0	2	0	0	0	0	6	2	0	0	0	0	1	0	0	2	0	2	0	15
4:00 PM	0	1	7	0	0	0	1	8	0	0	0	0	1	1	0	0	0	0	2	0	21
4:15 PM	0	0	4	0	0	0	1	2	2	0	0	0	0	0	0	0	1	0	0	0	10
4:30 PM	0	0	3	0	0	0	1	3	2	0	0	0	0	1	0	0	0	0	0	0	10
4:45 PM	0	0	0	0	0	0	1	4	0	0	0	0	1	0	0	0	1	0	0	0	7
5:00 PM	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	2	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	1	0	7
5:30 PM	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	5
6:00 PM	0	0	1	0	0	0	0	4	1	0	0	0	1	0	0	0	1	0	0	0	8
6:15 PM	0	0	2	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	8
Bicycles on Road																					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	1	1	0	0	0	0	0	0	0	1	1
3:45 PM	0	0	0	1	0	1	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

	Eastbound			Westbound			Northbound			Southbound		
Time	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total	CCW	CW	Total
3:30 PM	0	0	0	2	1	3	1	0	1	1	0	1
3:45 PM	0	1	1	0	0	0	0	0	0	0	1	1
4:00 PM	1	0	1	0	1	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	2	1	3	0	0	0	1	1	2	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	1	0	0	0
5:45 PM	0	1	1	0	0	0	1	0	1	3	3	6
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Aliso

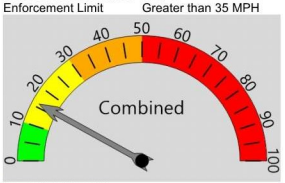
GPS
Latitude: 35.077313
Longitude: -106.601615

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

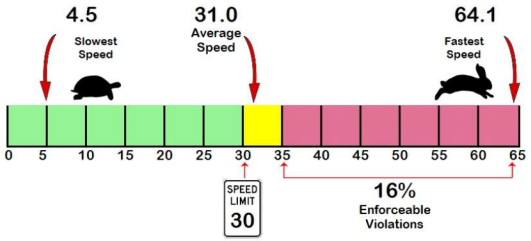
ADT
8588

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 16%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Aliso

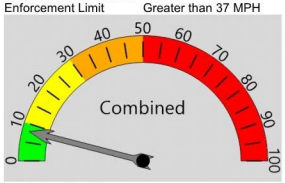
GPS
Latitude: 35.077313
Longitude: -106.601615

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

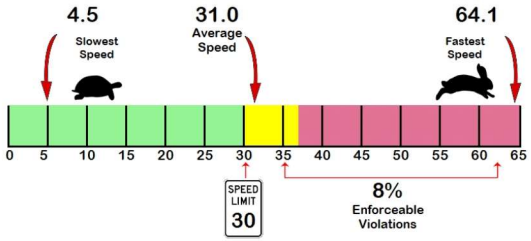
ADT
8588

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 8%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	3	4	4	11	10	14	30	72	213	493	7733

85th Percentile: 35

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	3	4	4	11	10	14	30	72	213	493	7733

85th Percentile: 35

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Aliso

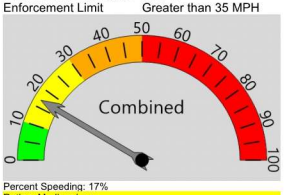
GPS
Latitude: 35.077313
Longitude: -106.601615

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

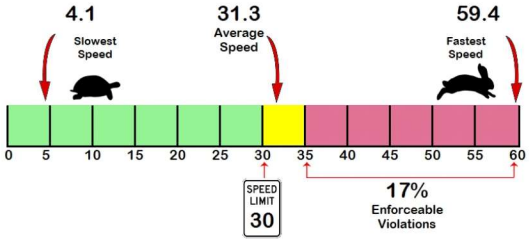
ADT
8269

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 17%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Aliso

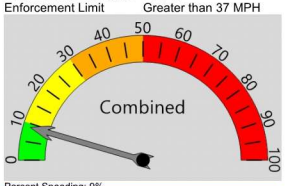
GPS
Latitude: 35.077313
Longitude: -106.601615

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

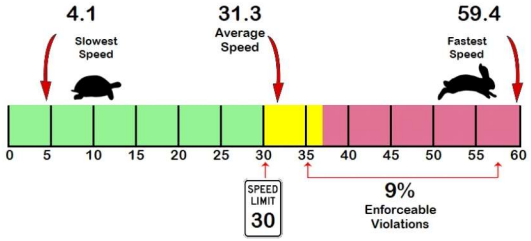
ADT
8269

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 9%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	2	1	2	4	7	8	24	79	170	442	7528

85th Percentile: 35.3

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	2	1	2	4	7	8	24	79	170	442	7528

85th Percentile: 35.3

Speed Enforcement Evaluator

Location
Lead & Bryn Mawr

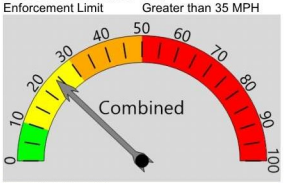
GPS
Latitude: 35.077258
Longitude: -106.609881

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

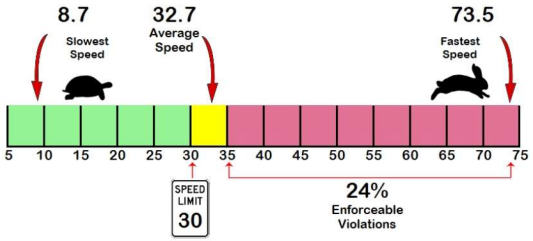
ADT
9656

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 24%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Bryn Mawr

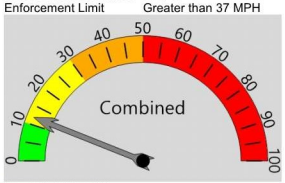
GPS
Latitude: 35.077258
Longitude: -106.609881

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

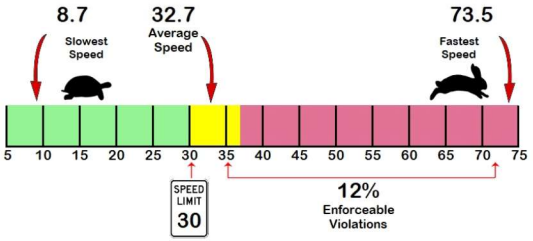
ADT
9656

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 12%
Rating: Medium Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	0	1	0	0	3	16	54	75	89	149	9269

85th Percentile: 36.3

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	0	1	0	0	3	16	54	75	89	149	9269

85th Percentile: 36.3

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Bryn Mawr

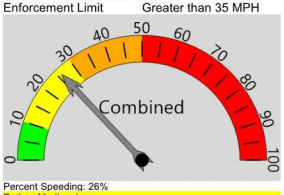
GPS
Latitude: 35.077258
Longitude: -106.609881

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

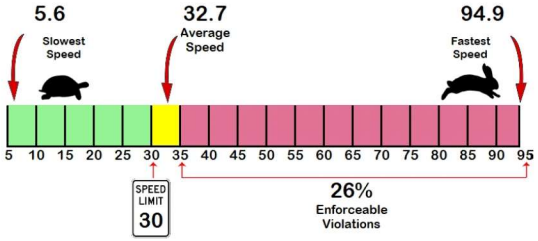
ADT
9506

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 26%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Bryn Mawr

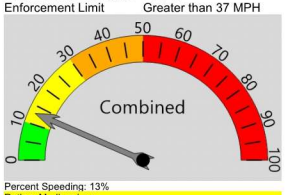
GPS
Latitude: 35.077258
Longitude: -106.609881

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

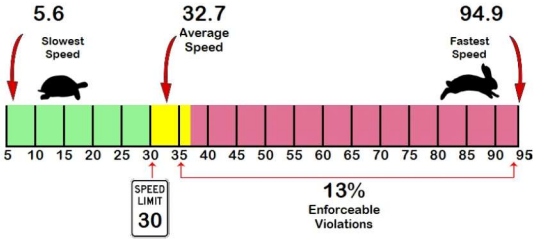
ADT
9506

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 13%
Rating: Medium Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	0	1	2	0	11	26	66	119	110	178	8992

85th Percentile: 36.6

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	0	1	2	0	11	26	66	119	110	178	8992

85th Percentile: 36.6

Speed Enforcement Evaluator

Location
Lead & Buena Vista

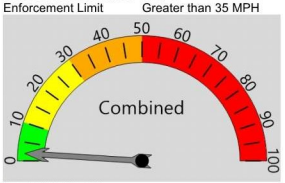
GPS
Latitude: 35.078064
Longitude: -106.623266

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

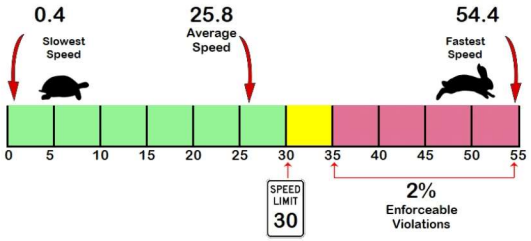
ADT
10649

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 2%
Rating: Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Buena Vista

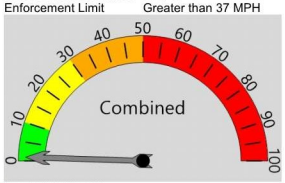
GPS
Latitude: 35.078064
Longitude: -106.623266

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

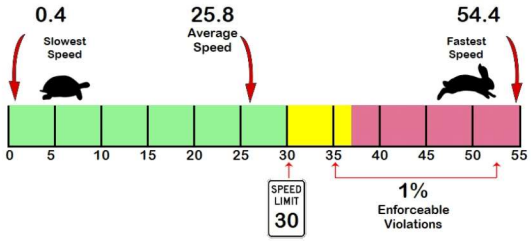
ADT
10649

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 1%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
2	14	16	31	49	70	122	170	294	461	714	1202	1729	5775

85th Percentile: 30.2

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
2	14	16	31	49	70	122	170	294	461	714	1202	1729	5775

85th Percentile: 30.2

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Buena Vista

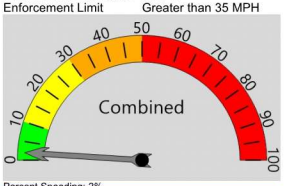
GPS
Latitude: 35.078064
Longitude: -106.623266

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

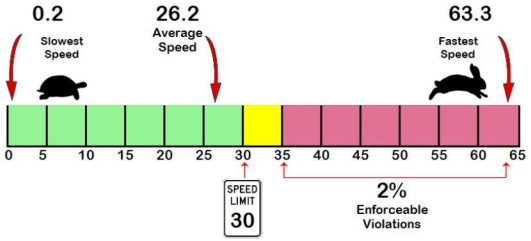
ADT
10547

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 2%
Rating: Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Buena Vista

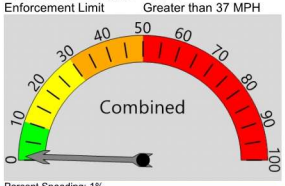
GPS
Latitude: 35.078064
Longitude: -106.623266

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

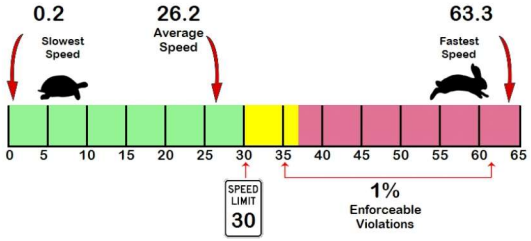
ADT
10547

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 1%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
5	10	19	25	47	56	86	180	225	418	662	1074	1697	6043

85th Percentile: 30.6

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
5	10	19	25	47	56	86	180	225	418	662	1074	1697	6043

85th Percentile: 30.6

Speed Enforcement Evaluator

Location
Lead & Edith

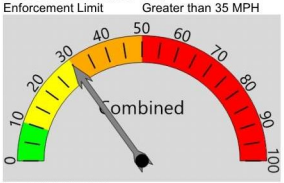
GPS
Latitude: 35.080331
Longitude: -106.642606

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

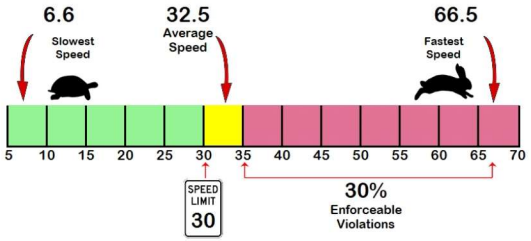
ADT
10562

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 30%
Rating: Medium



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Edith

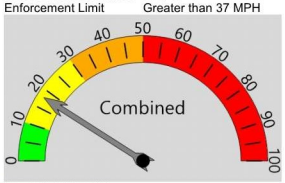
GPS
Latitude: 35.080331
Longitude: -106.642606

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

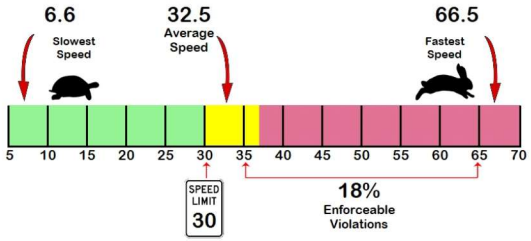
ADT
10562

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 18%
Rating: Medium Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	2	1	4	17	50	149	153	131	148	312	9595

85th Percentile: 37.5

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	2	1	4	17	50	149	153	131	148	312	9595

85th Percentile: 37.5

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Edith

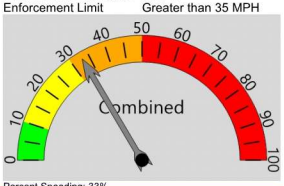
GPS
Latitude: 35.080331
Longitude: -106.642606

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

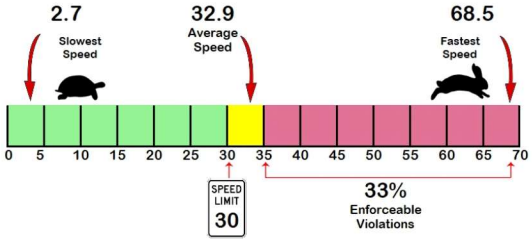
ADT
10370

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 33%
Rating: Medium



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Lead & Edith

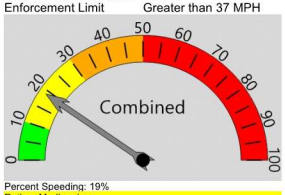
GPS
Latitude: 35.080331
Longitude: -106.642606

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

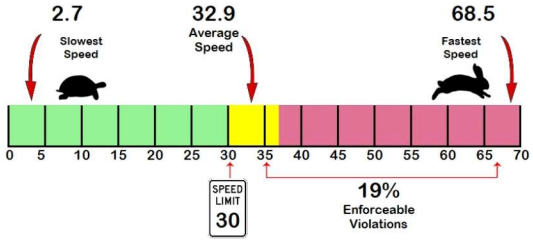
ADT
10370

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 19%
Rating: Medium Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	2	0	1	0	8	15	55	111	133	93	137	266	9549

85th Percentile: 37.8

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	2	0	1	0	8	15	55	111	133	93	137	266	9549

85th Percentile: 37.8

Speed Enforcement Evaluator

Location
Lead & Harvard

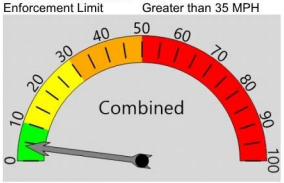
GPS
Latitude: 35.077382
Longitude: -106.620521

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

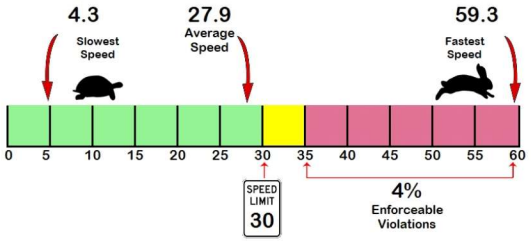
ADT
11779

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 4%
Rating: Low



Speed Enforcement Evaluator

Location
Lead & Harvard

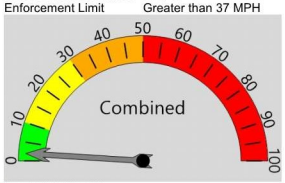
GPS
Latitude: 35.077382
Longitude: -106.620521

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

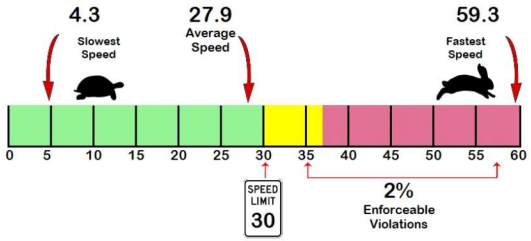
ADT
11779

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 2%
Rating: Low



Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	3	3	4	11	14	46	90	218	455	825	1775	8335

85th Percentile: 31.6

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	3	3	4	11	14	46	90	218	455	825	1775	8335

85th Percentile: 31.6

Speed Enforcement Evaluator

Location
Lead & Harvard

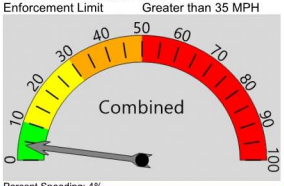
GPS
Latitude: 35.077382
Longitude: -106.620521

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

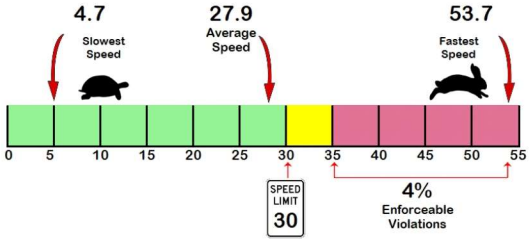
ADT
11567

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 4%
Rating: Low



Speed Enforcement Evaluator

Location
Lead & Harvard

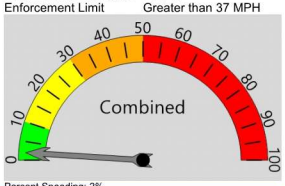
GPS
Latitude: 35.077382
Longitude: -106.620521

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

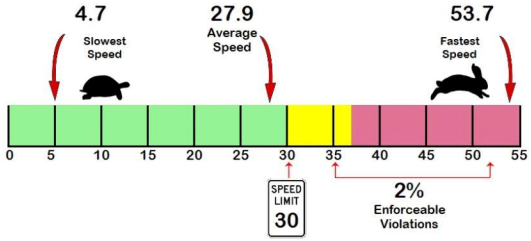
ADT
11567

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 2%
Rating: Low



Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	3	2	4	9	27	45	86	215	437	862	1705	8172

85th Percentile: 31.6

Vehicle Totals - B to A, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	3	2	4	9	27	45	86	215	437	862	1705	8172

85th Percentile: 31.6

Speed Enforcement Evaluator

Location
Coal & Arno

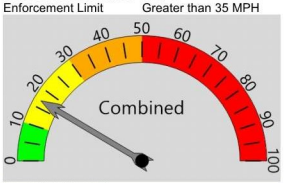
GPS
Latitude: 35.079547
Longitude: -106.644321

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
7717

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 17%
Rating: Medium Low

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Arno

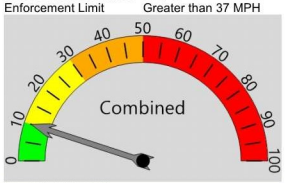
GPS
Latitude: 35.079547
Longitude: -106.644321

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
7717

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 10%
Rating: Medium Low

Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
1	0	0	5	7	18	19	31	44	61	90	213	490	6738

85th Percentile: 35.4

Lead and Coal Rest In Red 2024
Vehicle Totals - A to B, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
1	0	0	5	7	18	19	31	44	61	90	213	490	6738

85th Percentile: 35.4

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Arno

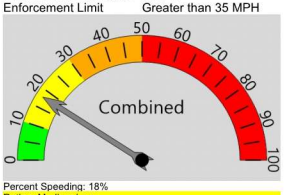
GPS
Latitude: 35.079547
Longitude: -106.644321

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

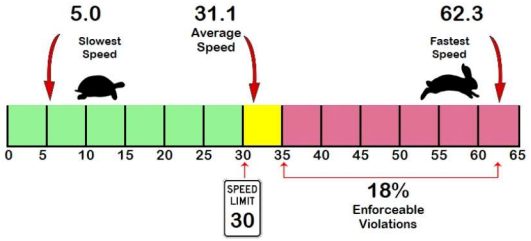
ADT
7778

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 18%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Arno

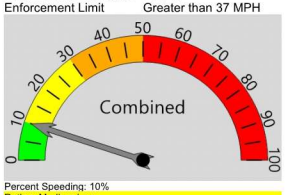
GPS
Latitude: 35.079547
Longitude: -106.644321

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

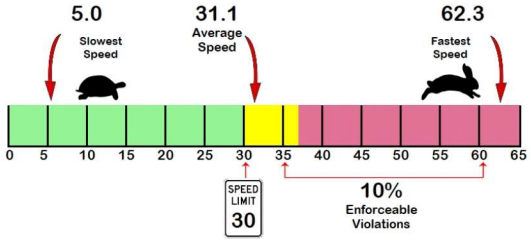
ADT
7778

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 10%
Rating: Medium Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	3	10	18	12	19	43	52	78	200	493	6848

85th Percentile: 35.6

Lead and Coal Rest In Red 2024
Vehicle Totals - A to B, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	3	10	18	12	19	43	52	78	200	493	6848

85th Percentile: 35.6

Speed Enforcement Evaluator

Location
Coal & Buena Vista

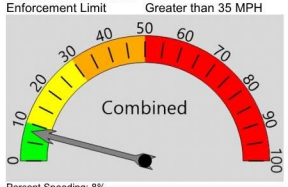
GPS
Latitude: 35.075119
Longitude: -106.625259

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

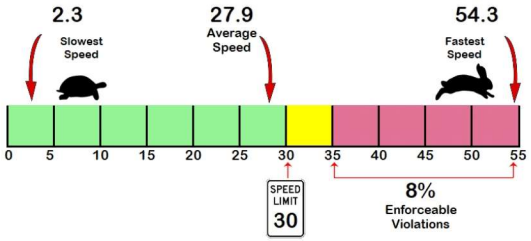
ADT
9331

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 8%
Rating: Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Buena Vista

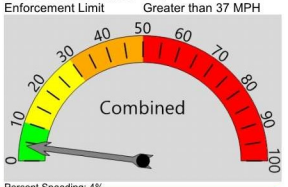
GPS
Latitude: 35.075119
Longitude: -106.625259

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

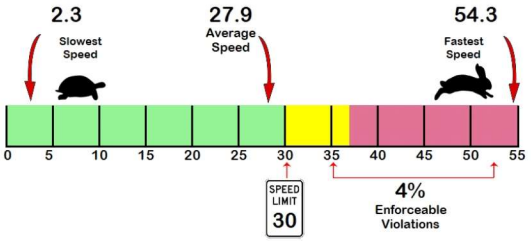
ADT
9331

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 4%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	4	6	3	13	20	29	60	152	326	665	864	1107	6082

85th Percentile: 33.1

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	4	6	3	13	20	29	60	152	326	665	864	1107	6082

85th Percentile: 33.1

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Buena Vista

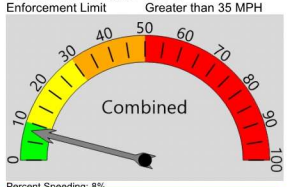
GPS
Latitude: 35.075119
Longitude: -106.625259

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

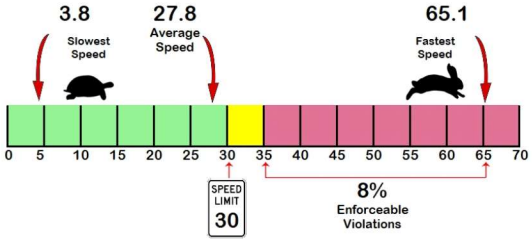
ADT
9479

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 8%
Rating: Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Buena Vista

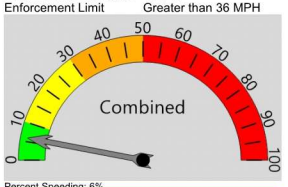
GPS
Latitude: 35.075119
Longitude: -106.625259

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

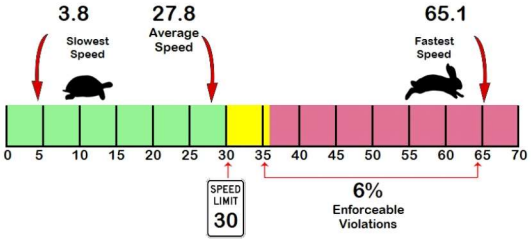
ADT
9479

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	6 MPH
Enforcement Limit	Greater than 36 MPH



Percent Speeding: 6%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	1	2	3	10	16	29	64	176	392	756	891	1100	6039

85th Percentile: 33

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	1	2	3	10	16	29	64	176	392	756	891	1100	6039

85th Percentile: 33

Speed Enforcement Evaluator

Location
Coal & Hermosa

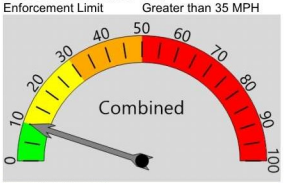
GPS
Latitude: 35.075383
Longitude: -106.603670

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
8073

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 10%
Rating: Medium Low

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Hermosa

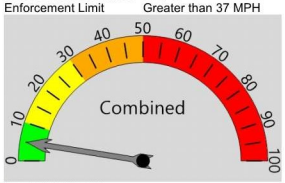
GPS
Latitude: 35.075383
Longitude: -106.603670

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
8073

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 5%
Rating: Low

Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	1	0	0	3	10	21	59	107	181	429	7262

85th Percentile: 34

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	1	0	0	3	10	21	59	107	181	429	7262

85th Percentile: 34

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Hermosa

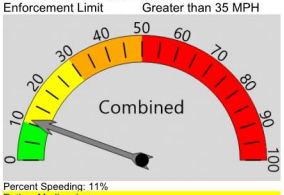
GPS
Latitude: 35.075383
Longitude: -106.603670

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

ADT
7872

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 11%
Rating: Medium Low

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Hermosa

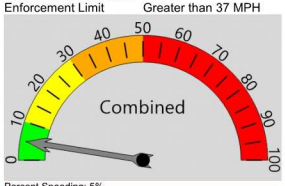
GPS
Latitude: 35.075383
Longitude: -106.603670

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

ADT
7872

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 5%
Rating: Low

Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	1	0	1	8	10	24	50	83	190	412	7093

85th Percentile: 34

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	1	0	1	8	10	24	50	83	190	412	7093

85th Percentile: 34

Speed Enforcement Evaluator

Location
Coal & Tulane

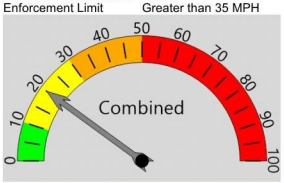
GPS
Latitude: 35.075548
Longitude: -106.606673

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
8923

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 20%
Rating: Medium Low

Speed Enforcement Evaluator

Location
Coal & Tulane

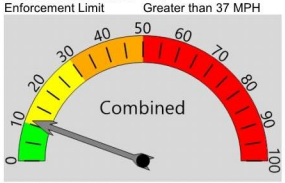
GPS
Latitude: 35.075548
Longitude: -106.606673

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

ADT
8923

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 11%
Rating: Medium Low

Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	0	0	0	1	3	6	15	56	86	220	8536

85th Percentile: 35.8

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	0	0	0	0	1	3	6	15	56	86	220	8536

85th Percentile: 35.8

Speed Enforcement Evaluator

Location
Coal & Tulane

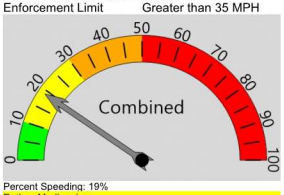
GPS
Latitude: 35.075548
Longitude: -106.606673

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

ADT
8863

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 19%
Rating: Medium Low

Speed Enforcement Evaluator

Location
Coal & Tulane

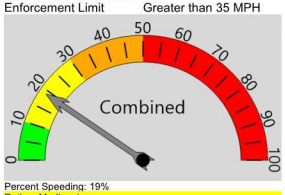
GPS
Latitude: 35.075548
Longitude: -106.606673

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

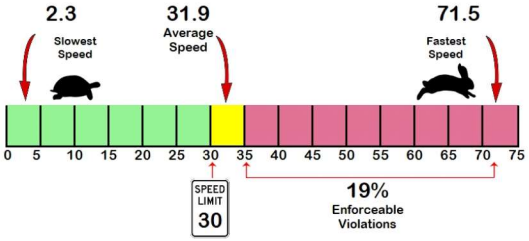
ADT
8863

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 19%
Rating: Medium Low



Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	1	0	0	0	1	6	2	12	27	50	107	268	8389

85th Percentile: 35.6

Vehicle Totals - A to B, East

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	1	0	0	0	1	6	2	12	27	50	107	268	8389

85th Percentile: 35.6

Speed Enforcement Evaluator

Location
Coal & Vassar

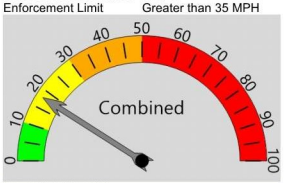
GPS
Latitude: 35.075553
Longitude: -106.615098

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

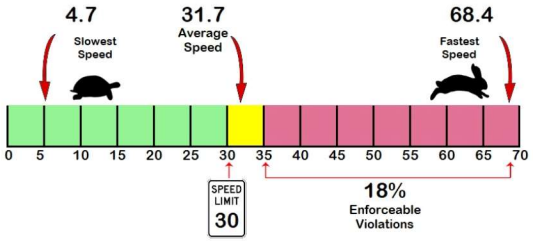
ADT
9886

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 18%
Rating: Medium Low



Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Vassar

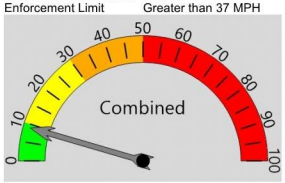
GPS
Latitude: 35.075553
Longitude: -106.615098

Analysis Dates
Start: 4/10/2024
End: 4/10/2024

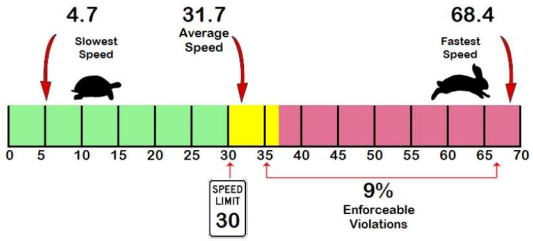
ADT
9886

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 9%
Rating: Low



Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	0	0	11	16	11	12	12	56	124	375	9268

85th Percentile: 35.4

Vehicle Totals - A to B, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	1	0	0	11	16	11	12	12	56	124	375	9268

85th Percentile: 35.4

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Vassar

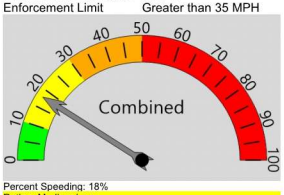
GPS
Latitude: 35.075553
Longitude: -106.615098

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

ADT
9948

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	5 MPH
Enforcement Limit	Greater than 35 MPH



Percent Speeding: 18%
Rating: Medium Low

Lead and Coal Rest In Red 2024

Speed Enforcement Evaluator

Location
Coal & Vassar

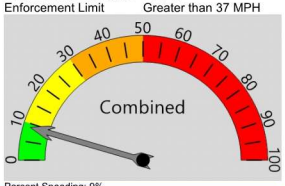
GPS
Latitude: 35.075553
Longitude: -106.615098

Analysis Dates
Start: 4/11/2024
End: 4/11/2024

ADT
9948

Total Percentage of Enforceable Violations

Posted Speed Limit	30 MPH
Enforcement Tolerance	7 MPH
Enforcement Limit	Greater than 37 MPH



Percent Speeding: 9%
Rating: Low

Lead and Coal Rest In Red 2024
Vehicle Totals - Combined

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	1	5	8	14	16	12	21	64	139	377	9289

85th Percentile: 35.4

Vehicle Totals - A to B, None Specified

<= 2	<= 4	<= 6	<= 8	<= 10	<= 12	<= 14	<= 16	<= 18	<= 20	<= 22	<= 24	<= 26	> 26
0	0	2	1	5	8	14	16	12	21	64	139	377	9289

85th Percentile: 35.4

Appendix D: Public Comments

City of Albuquerque Public Meeting

Lead & Coal Studies

Heights Community Center | 823 Buena Vista Dr SE, Albuquerque, NM 87106

Feedback:

I live on Coal and Columbia and walk a lot in my neighborhood to the store, to tonights meeting, etc. I prefer the single-lane option for Coal, second choice is two lane in one direction w/ enhanced safety

Name: Rose Dyer Contact: rose@dyer.me

I do not like the two-direction option for Coal + Lead.

DEC 18
6-8pm

LEE ENGINEERING

City of Albuquerque Public Meeting

Lead & Coal Studies

Heights Community Center | 823 Buena Vista Dr SE, Albuquerque, NM 87106

Feedback:

MY 1ST CHOICE IS TO HAVE THE ENHANCED SAFETY OPTION.

2ND CHOICE (IF COST NEEDS TO BE REDUCED) SPEED REDUCTION

Name: SALLY BEERS Contact: 505 3559217

DISTRICT 6

DEC 18
6-8pm

LEE ENGINEERING

Estela Gabaldon

From: Carlos A. Michelén Ströfer <c.michelen.strofer@gmail.com>
Sent: Monday, January 13, 2025 3:22 PM
To: Paul Barricklow; Estela Gabaldon; Stephen Montano
Cc: Don Hancock; Rogers, Nichole L.; bill ashford; josh.kefauver@gmail.com; jamontalbano@gmail.com; Mardon Gardella; Joseph; Eli Sanchez; Kirksey, Ziarra; catherine.hubbard@gmail.com; info@wilsonstudio.com; maggie20silva@gmail.com; BryanDombrowski3@yahoo.com; site.org+leadcoal@gmail.com; abqmetzner@gmail.com; pfmetzner@gmail.com; rose@dyer.me; Greg Weirs; justincjohnson2@gmail.com
Subject: Re: Lead and Coal Public Meeting 3 Slides
Attachments: DOWNTOWN-Walkability+Analysis.pdf

Hi Paul & Team,

Unfortunately, I couldn't make it to the December public meeting, but I just reviewed the slides and have some comments. Maybe some of them can be addressed in the report.

- For the speed studies (slide 15-18) can you also calculate/plot the **85th percentile** speed? It could be an additional horizontal line.
- In our working group meeting you had shown **Pedestrian LOS** (e.g. based on signal timings). These were not in the final slides. I hope these are presented in the report.
- For the **Queuing study**, it would be good to have an indication of how often the queuing condition occurs. If it only occurs for one hour, during peak hour, it might be a good trade-off to accept some queuing for enhanced safety and walkability throughout the day. Similar for the vehicle LOS (are these based on the worst conditions? how often do those conditions happen?)
- On slide 32, does going to a single lane configuration really increases the **travel time** from 2.5 minutes to 12.5 minutes? Seems unrealistic to me. At that point I would assume drivers would look for alternate routes. But also, if this only happens for 10 minutes a day it might be acceptable.
- Thank you for including the **pedestrian LTS.** The single-lane configuration does the best at reducing the LTS, but it would still remain mostly at LTS 3. Two comments:
    - In the report it would be good to discuss/recommend what would be needed to get the entire (or most of) study area to LTS 2
    - Are you sure LTS was calculated correctly? From the Existing Conditions details on slide 57, the sidewalk width is 8', and the buffer (buffer + bikelane) is 9', which would suggest LTS of 2. (But also, I don't think the sidewalks are 8'... from my calculations they are closer to 6.5')
- In our working group, you mentioned that with the **single lane configuration** drivers might misuse the large buffer. I just want to point out that this has been done successfully in Albuquerque (on Lead & Coal nonetheless!). On the bridge over the railroad tracks, Lead has a 13' buffer (from a previous lane reduction I'm guessing). The proposed 10' buffer is feasible.
- There are a few things to note for the stretch **west of the highway** (Huning Highlands, my neighborhood)

    - The newly adopted bike plan calls for protected (vertical separation) bike lanes west of the highways and assigns this a "high priority". This should be incorporated into the proposal.
    - While you only showed a single road profile for the entire study area, west of the highway the road width is 30' (compared to 25' east of the highway). There might be more room to play here, e.g. to go to two-way traffic with a two-way cycle track.
- I appreciate all the work done for the **"enhanced safety" option**, and think many of those elements should be used even for the one-lane or two-way configurations. However, I still believe maintaining two-lane one-way configuration will not be sufficient to truly enhance safety.
    - I am attaching the Albuquerque Downtown Walkability Analysis done in 2014 by Jeff Speck. On page 18 he argues against 2-lane one-ways: "*Drivers tend to speed on multiple-lane one-way streets, because there is less friction from opposing traffic, and due to the temptation to jockey from lane to lane. In contrast, when two-way traffic makes passing impossible, the driver is less likely to slip into the "road racer" frame of mind.*"
    - Personally, I would prefer to solve this problem once and for all, even if it means having to wait to secure some additional funding (e.g. two-way conversion is significantly more expensive). One option is a two-way conversion west of the highway to continue the downtown configuration, and the one-lane option east of the highway where the right-of-way is narrower and would not support two-way bike lanes.

Thanks again for this great work and presentations. I'm looking forward to seeing the report!

Best,
Carlos

--
Carlos A. Michelen Strofer, PhD

On Thu, Dec 19, 2024 at 10:44 AM Estela Gabaldon <egabaldon@lee-eng.com> wrote:

> Good morning, all,
>
> I've attached the slides from last night's public meeting. Let me know if you have any issues accessing the file.
>
> Thank you!
>
> **ESTELA GABALDON**
>
> ENGINEERING DESIGNER
>
> 8220 San Pedro Dr NE, Suite 150
>
> Albuquerque, NM 87113

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Thursday, January 23, 2025 1:20 PM
To: Paul Barricklow; Estela Gabaldon; Stephen Montano
Cc: Eli Sanchez; Don Hancock; Brown, Timothy J.; Rogers, Nichole L.
Subject: Feedback: Followup Questions I/IV

In advance of the January 29 Lead Coal Task Force meeting and your preparation of a draft study report, I am submitting several questions.

Please respond in email, and, if necessary, in the meeting.

I request, also, that these questions be included in public comments for the study.

Most of these questions have been raised in previous communication. If you have previously replied, please refer me to those responses.

In order to help track these questions, I will be submitting them in a series of separate emails.

Follow Up Question I: Road Departure/Off Road Crash Reporting

1. Will you be reporting road departure/off road crash data in your report for the study?
2. If so, what is the basis for any data on Lead-Coal or elsewhere in Albuquerque? APD and DMD have previously reported in the LC Working Group that they did not/do not collect this data on accident reports.
3. Is there, then, reliable road departure/off road crash data (historical or ongoing) for APD/DMD, or not?

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Thursday, January 23, 2025 1:38 PM
To: Paul Barricklow; Estela Gabaldon; Stephen Montano
Cc: Eli Sanchez; Don Hancock; Greg Weirs; Brown, Timothy J.; Rogers, Nichole L.
Subject: Followup Questions II/IV: Cross Street Driver Behavior

1. Is the study measuring or compiling data on cross street driver behavior?

2. Specifically, is the study measuring or bringing forward previous data on north-south speed across signal intersections?

3. The intersections with greatest risk of high speed collisions onto sidewalks and into adjacent homes are the signal intersections (at Stanford, Girard-2, Bryn Mawr, Carlisle-2,Wellesley and Columbia). What do we know, in total, about north-south driver behavior as a factor in collisions at these locations (speed, red light running)?

4. Do your proposals for mitigation include any measures directed at north-south driver behavior?

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Thursday, January 23, 2025 2:01 PM
To: Paul Barricklow; Estela Gabaldon; Stephen Montano
Subject: Followup Questions III/IV: Noise Data

1. What, as precisely as possible, was the location of noise meters? How many feet from the roadway?

2. In large part because of signalization, traffic flow and traffic noise on Lead-Coal (in my area) follow a relatively tight wave pattern: a pulse of traffic and noise followed by a period of quiet. If the reported noise averages capture both active and quiet periods, then the intensity of noise exposure as a platoon moves past will be under measured. Can you (or the noise consultant or a third party) go back into the noise measurements, confirm this phenomenon, and correct for it?

3. Peak vehicle noise is probably greatest at and immediately downstream of signal intersections. What was the location of the noise meters vis-a-vis traffic signals?

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Thursday, September 12, 2024 11:33 AM
To: Paul Barricklow
Cc: Don Hancock; Greg Weirs; Rogers, Nichole L.; Eli Sanchez; Estela Salinas; Stephen Montano; Brown, Timothy J.
Subject: Lead-Coal Washington to Yale: vertical and horizontal curves [Filed 12 Sep 2024 11:51]

Categories: Filed by Mail Manager

Hi Paul,

I've had the chance to look at the slides from the Lead-Coal meeting last week.

I was encouraged to see that your slide on area characteristics includes (roadway) curves.

The Washington to Yale section is notable for several curves, both horizontal and vertical. Especially in combination with the narrow ROW and shallow side setbacks, these curves create easily predictable and identifiable sightline deficits.

I encourage you and your team to evaluate some of these locations including how the approach of two unidirectional travel lanes affects sightlines.

Horizontal curves

Coal and Harvard: crossing south to north from SE corner
Lead and Montclaire: crossing south to north from SE corner
Lead and Solano: crossing south to north from SE corner

Vertical curves:

Coal and Hermosa: crossing south to north from SE corner
Lead and Amherst: crossing south to north from SE corner.

As I explained in my public comments, the Washington to Yale section has both site-specific (the above examples) and generalized sightline limitations. For notable examples of the generalized problem, I suggest your team look at:

Coal and Cornell: crossing north to south from NW corner
Coal and Columbia: crossing south to north from SE corner.

Thanks for your team's work so far.

If you can confirm receipt of this email and of my public comments from last week I would appreciate it.

Joseph Aguirre

Estela Gabaldon

From: Eli Sanchez <16fleetfox@gmail.com>
Sent: Tuesday, October 8, 2024 5:35 PM
To: Estela Salinas
Subject: Fwd: UPDATE ON ROAD DEPARTURE CRASH AT COAL/GIRADE ON 10/1/24

Sent from my iPad

Begin forwarded message:

> **From:** Eli Sanchez <16fleetfox@gmail.com>
> **Date:** October 8, 2024 at 4:18:00 PM MDT
> **To:** "Nichole L. Rogers" <nrogers@cabq.gov>, Paul Barricklow <pbarricklow@lee-eng.com>
> **Subject: UPDATE ON ROAD DEPARTURE CRASH AT COAL/GIRADE ON 10/1/24**
>
> Nicole, Paul,
> I want to update you on a discussion I had with the resident who had the signal light projected into his yard during the crash with serious injuries and which projected a signal light into his yard. The resident is a mature, intelligent young man who has lived there for years. I asked him how many road departure crashes had he observed at that intersection over the past year. His response was at least five as serious / violent as the one sent you two. He described them as follows:
> - One vehicle departed the road and took out the light/signal pole on the southeast corner.
> -Another multi-car crash hit the wall in front of his house sending a cinder block flying just inches from his head. He was working on his car in his own front yard!!
> - Still another multi car crash caused him to go out his front door upon hearing a thunderous crash to be confronted by a yelling / screaming woman asking him to help her remove her trapped infant from her car. He was able to extract the child as the vehicle began to emit heavy smoke. It should be noted that his eyes watered up as he told me about this incident. He went on to say how sad to think that the trauma would probably occupy the mother and child's thoughts for many years to come!
>
> Be advised, this intersection has RIR installed! Also just a couple blocks west is the only ASE Camera in the corridor!
> When one considers the number of serious road departure crashes at this intersection in the past year (AND AFTER RIR and speed camera were installed), it is going to take actions on the order of one lane travel with speed reduced to 25 MPH in order to protect private property, residents and infrastructure!!
> Sent from my iPad

FIRE LINE DO NOT CROSS

Estela Gabaldon

From: Eli Sanchez <16fleetfox@gmail.com>
Sent: Tuesday, October 8, 2024 5:35 PM
To: Estela Salinas
Subject: Fwd: ROAD DEPARTURE SERIOUS INJURY VEHICLE CRASH 9/26/2024

Sent from my iPad

Begin forwarded message:

> **From:** Eli Sanchez <16fleetfox@gmail.com>
> **Date:** October 1, 2024 at 9:21:42 AM MDT
> **To:** Paul Barricklow <pbarricklow@lee-eng.com>, "Nichole L. Rogers" <nrogers@cabq.gov>
> **Subject: ROAD DEPARTURE SERIOUS INJURY VEHICLE CRASH 9/26/2024**
>
> Paul, Nicole,
> These pictures were taken following a violent crash at COAL/GIRAD on 9/26/2024.
> - This property has been the location of multiple vehicle crashes.
> Residents have had to barricade that corner using a dead tree trunk in attempt to protect themselves!
> - These pictures depict numerous other road departures which have projected Block wall debris, road signs, signal lights and vehicles onto private property!
> - This study should identify the very serious lack of road offset from homes and properties. ONE LANE WITH 25 MPH CONFIGURATION IS THE ONLY LOGICAL DIRECTION TO PURSUE!!

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Friday, October 11, 2024 3:19 PM
To: Paul Barricklow; Brown, Timothy J.
Cc: Rogers, Nichole L.; Don Hancock; Greg Weirs; Estela Salinas; Stephen Montano; Arellano, Dionna; dougsmall@cabq.gov; Kirksey, Ziarra

Subject: Coal and Girard: still dangerous for anyone near the roadway

2,472 days since we advised Mayor Keller about the countless crashes onto our sidewalks and into our homes, Coal and Girard, and the other signal intersections from Washington to Yale, remain dangerous for anyone near the roadway.

From Eli Sanchez's conversation with the resident at the SE corner of Coal and Girard:

> "The resident … has lived there for years. [O]ver the past year [he has seen] at least five [crashes] as serious / violent as [October 1].
> - One vehicle departed the road and took out the light/signal pole on the southeast corner.
> -Another multi-car crash hit the wall in front of his house sending a cinder block flying just inches from his head. He was working on his car in his own front yard!!
> - Still another multi car crash caused him to go out his front door upon hearing a thunderous crash to be confronted by a yelling / screaming woman asking him to help her remove her trapped infant from her car. He was able to extract the child as the vehicle began to emit heavy smoke."

Some question and requests for Lee Engineering and DMD:

1. Please bring the crash report from the October 1 event to the next working group meeting. If you can, provide it to the group in advance.

Do we know if speed was a factor in this event? If so, for the vehicle(s) on Coal or for the vehicle(s) on Girard?

2. What do we know about speed on the higher volume north south streets from Washington to Yale (Carlisle, Girard, Columbia, Stanford)?

What do we know about speed on these streets as a factor in high impact crashes at the high risk signal intersections as these streets cross Coal and Lead?

3. What more about speed on north-south streets will we learn from Lee's ongoing study?

4. Slide 13 from Lee's Sept 5 presentation presents crash rates for "off roadway" events on Lead/Coal and the comparison streets.

Is "off roadway" the same as "road departure"?

If so, my recollection from working group meetings was that APD was not systematically collecting road departure data? Is my recollection correct, or not?

So, is the off roadway data for Lead/Coal meaningful or not?

5. It's fully reasonable to conclude that it's unsafe to operate signal intersections on LC from Washington to Yale. The ROW is too narrow and homes are too close to the curb. So, it's regrettable that traffic circles are not one of the current alternatives for consideration. In its final report, Lee should at least comment on whether traffic circles are an option for later consideration.

If you wanted to walk along Coal Avenue or Girard Boulevard with your family -on your way to Nob Hill or to UNM- would you feel safe standing at the SE or NE corner of Coal and Girard?

Thanks for your attention.

Joseph Aguirre

Estela Gabaldon

From: Eli Sanchez <16fleetfox@gmail.com>
Sent: Tuesday, October 15, 2024 12:10 PM
To: Paul Barricklow; Estela Salinas
Cc: dougsmall@cabq.gov; Dionna Arellano
Subject: LEAD COAL STUDY QUESTIONS

Paul, Estela,

In reviewing the slides and comments from the last public meeting, I have some questions / concerns. Seems we are all in concurrence that there exists no comparable roadway in New Mexico to reference this study to. That is progress!

Having said that, we would like to also fully capture / retain focus on the history of how this roadway's use has resulted in the 5 decades old problem that exists today!

Concern / questions are: (1). When reference documents are used to compare such things as crashes, excessive speeds, as is being done in your slide presentation, how exactly are you factoring in the fact that this residential street is being used as a main arterial roadway. One can easily conclude that this corridor was intended, engineered and built as a residential street. In it's use (misuse) as a main arterial and seeing the serious numbers of dangerous road departure crashes, serious roll over crashes, infrastructure / private property damage that has occurred (over 700 in a four year period), it would be shocking to conclude that this corridor is safe for future use in it's current form. (2). How do your metrics factor in the extremely narrow set back distances to homes and private property? These set backs are as narrow as 15ft. (3). When will your study collect speed data on Lead/Coal east of Carlisle? This section of roadway has been neglected as it relates to Rest in Red (RIR) and Automated Speed Enforcement cameras (ASE) tools and the excessive speeds and reckless driving behaviors seen daily reflect this lack of enforcement coverage!

We look forward to hearing your responses at the next task force meeting.

Respectfully sent, Eli Sanchez
Sent from my iPad

Estela Gabaldon

From: Eli Sanchez <16fleetfox@gmail.com>
Sent: Thursday, October 24, 2024 3:00 PM
To: Paul Barricklow; Stephen Montano; Estela Gabaldon
Cc: Tom Simic; SANDRA AUMILLER; neighbors_nobhill-nm@mailman.swcp.com
Subject: FEEDBACK ON LEE ENGINEERING SLIDE PRESENTATION FOR PUBLIC MEETING SCHEDULED FOR 14NOV2024

Paul, Stephen and Estela,

1. Included are questions/comments on your proposed slide presentation for the upcoming public meeting. I apologize for my wordiness (just me). Comments / Questions as follows:

- If you were to compile data from Washington to Yale vs Washington to Broadway, how would that affect the findings of your study?
  I ask this because the width of roadway west of Yale is wider and much more accommodating to a higher level of service and speeds.
- How would the data change by using reference tables from Highway Safety Manual and Highway Capacity Manual and apply them to crashes within the Washington to Yale roadway only?

2. My reason for asking these questions are:
- The "Corridor" in which the very serious road departure crashes, rollover crashes, property damages AND 5 fatalities have occurred happened between Washington and Yale.
- Citizen concerns expressed in emails, phone calls, and public meetings have addressed dangerous conditions requiring immediate attention in the roadway between Washington and Yale on Lead/Coal.
- Formation of the working group was requested and formed to address dangerous crashes within this corridor.
- The working group with CABQ leadership has invited participation from outside the Washington to Yale corridor with no interest shown. This has also been true for the on going study.
- Again, it should be noted that the roadway west of University on L/C are much wider, even allowing for roadside parking. Stated simply, the most dangerous portion of this roadway is between Washington (Montclair) and Yale. That section of roadway is significantly narrower and home, property and sidewalk offsets are very much less.

3. Also noted were questions related to slides:
- "Additional Speed Data on Lead / Coal from RIR" slides all (except Lead-Buena Vista) clearly show a complete lack of drivers observing the posted speed limit of 30 MPH. That fact is particularly significant when speaking of a narrow residential roadway with a clear history of dangerous crashes!
- Your "Crash / Vehicle Volume " slides should NOT be used in anyway to imply or claim that what they show is acceptable progress!

One hundred and seventy five crashes (info taken from 2013) is the fewest number of crashes shown on your graphs. That is a hell of alot of dangerous crashes in this narrow, short distance roadway!
- Seven hundred ninety six (796) crashes in the last four year period of data should further demonstrate how reckless / irresponsible it is to consider this roadway (in it's present configuration) to be safe! These numbers came from the information you are using in your presentation.

4. I look forward to your written response to these questions/ concerns. Respectfully sent

Sent from my iPad

Estela Gabaldon

From: Joseph Aguirre <leadcoalsafetybrigade@gmail.com>
Sent: Tuesday, December 3, 2024 11:10 AM
To: mayorkeller@cabq.gov; patrick@cabq.gov; jenniferturner@cabq.gov
Cc: dougsmall@cabq.gov; Arellano, Dionna; Rogers, Nichole L.; Antoinette; Marianna Anaya; Don Hancock; Greg Weirs; Paul Barricklow; lkeefe@cabq.gov; Estela Gabaldon; Stephen Montano
Subject: Someone is going to get killed

Dear Mayor Keller, COO Montoya, and DMD Director Turner:

These photos at the NE corner of Coal and Cornell yesterday 12:55 pm.

Countless high impact crashes at this intersection, many onto the sidewalk.

Dangerous sidewalk. Dangerous intersection. Dangerous road. Reckless operation. This is the - what you appear to consider - "normal" consequence of operating a principal arterial on a narrow residential side street.

A pedestrian is going to get killed here. A student on their way to UNM. A senior citizen on their way to Smith's. A family on their way to Saggios.

Keep your cars on the road where they belong.

Yeah, the boulders helped keep the car out of that front yard. What kind of city makes residents build their own perimeter defenses in order to keep their homes and families safe?

Joseph Aguirrre
Spokesperson, Lead Coal Safety Brigade

Estela Gabaldon

From: Rose Dyer <rose@dyer.me>
Sent: Wednesday, December 25, 2024 5:04 PM
To: Estela Gabaldon
Subject: Lead/Coal feedback

Thank you, Ms. Gabaldon and everyone from Lee Engineering, for presenting at the community meeting on December 18. I enjoyed learning about the various ways data has been collected and the possible options for improving safety and noise pollution in the Lead/Coal corridor.

At the meeting I asked how we actually decide on the options that we would like and was told to give feedback. So here is that feedback! :)

First Choice: Enhanced Safety Options - Single Lane (Protected Bike Lane),
Slide 72.

Second Choice: Enhanced Safety Options - Single Lane, Slide 71.

Third Choice: Enhanced Safety Options - Enhanced Safety Options, Slide 69.

Here are the reasons I prefer these options in this order:

I used to live in a place that required a car to go everywhere, and I moved to Columbia and Coal specifically because I want to walk or ride my bike to my daily activities. And I do actually walk all over my neighborhood to stores, restaurants, UNM and CNM. I also take the ART and ride my bike. I hardly ever drive my car. So my preference is to make my neighborhood safe, reducing accidents and noise and air pollution. As a pedestrian I find it much safer to cross a one-way street, and one lane is easier to cross than two. It is also safer and quieter when there is less traffic and when that traffic is slower. Twenty-five mph or slower is ideal. Possible traffic delays are not important to me and I would be happy if we could reduce vehicle traffic as much as possible and/or spread it more evenly across all our neighborhood streets because it is currently too concentrated on Lead and Coal. I love the idea of bump-outs to make north-south streets narrower at the intersections, such that car traffic has to slow down a lot to turn onto them. Also, I cannot in good conscience allow my teenager to use the bike lines as they are today: they need to be separated from car traffic, and that car traffic needs to be much slower!

I am very much NOT in favor of two-way traffic on Lead and Coal. It will be expensive and make crossing streets trickier than it is now.

Thanks again for your time and efforts. Have a great holiday!

Looking forward to a quieter and safer new year,

Rose Pezzuti Dyer

> On Dec 19, 2024, at 10:44 AM, Estela Gabaldon <egabaldon@lee-eng.com> wrote:

Good morning, all,

I've attached the slides from last night's public meeting. Let me know if you have any issues accessing the file.

Thank you!

ESTELA GABALDON
ENGINEERING DESIGNER

8220 San Pedro Dr NE, Suite 150
Albuquerque, NM 87113
Direct: (505) 545-8465
Office: (505) 338-0988
www.leeengineering.com

<image001.png>

<Lead and Coal PM 12-18-2024_RedEG.pdf>

Lead and Coal Public Meeting			
No.	**Feedback**	**Name**	**Email**
1	I was SHNA representative with Don Hancock during the Richardson admission re-... ... of Lead and Coal. I was a proponent for 2 ways, but I feel narrowing EIC has worked out well.	Tom Ocken	Twodesign2@mac.com
2	Everyone wants comparisons- You can't forget that road departures go into someone's HOME!!		
3	As a resident of Huning Highland, I definitely want traffic to be controlled, but I don't want to kill the downtown area.	Janet Sykes	janetazer@hotmail.com

December 6, 2024

Paul Barricklow, PE, PTOE
Principal, Lee Engineering
Via email

Dear Mr Barricklow:

Lead and Coal Studies Public Meeting Feedback: stay focused

Please accept the following, and the referenced attachment, as public comments of record for the ongoing Lee Engineering *Lead and Coal Studies.*

My comments are in response to your November 14, 2024 Lead Coal public meeting.

I encourage you in the remainder of your study and in your study report to stay focused on where and what the problem is that you have been engaged to work on. The problem is the dangerous crash conditions alongside our homes on Lead and Coal Avenues from Washington St to Yale Blvd. Your effort must focus on making this section of the roadway safe for the families who live, walk, and bike along it.

Please understand that it is the sustained effort of families along this roadway section, in response to those conditions, that has led to your study.

Our families' effort was responsible for City of Albuquerque (CABQ) Mayor Tim Keller's 2018-2019 Lead Coal Task Force. During that process we recommended (and received broad support - including from NMDOT- for) a Federal Highway Administration (FHWA) Road Safety Audit (RSA) on Lead Coal from Washington to Yale. In October of 2019, after initial opposition, Department of Municipal Development (DMD) Director Pat Montoya ordered the FHWA to conduct the RSA we had recommended. Despite having been promised by the Mayor himself, the RSA was killed 2 months later, before it had even started, with never an explanation.

It was our continuing effort that then led to the June 2022 FHWA Lead Coal RSA. (As a "pedestrian-focused" study, it appears to have been structured deliberately to deny and avoid a look at *road* safety conditions along the corridor.)

And it was our families that called, successfully, for the creation of the (fall 2022-November 2024) Mayoral Lead Coal Working Group, whose purpose was to implement recommendations of the RSA. As you of course know, it was the Working Group process that resulted in your Lead and Coal Studies, charged to evaluate several of those recommendations.

Finally, please be aware that it was our families that asked our state legislators to support our effort on Lead-Coal and that it is their capital outlay dollars which now fund your study. That funding was always for and about the dangerous conditions on our section of Lead-Coal.

There are two problems with Lead-Coal from Washington to Yale. The immediate problem is the road itself. DMD is operating a principal arterial on narrow residential side streets. I've previously pointed out to you in detail the many obvious road safety conditions, both generalized and location specific. This should need no explanation. Of course the road is dangerous. Of course it's substandard.

The second problem is the operation of the roadway. DMD, and a series of Mayoral administrations including the current, have, over decades, been indifferent to how harmful it is to operate a principal arterial on only 60 feet of right of way, with traffic just 15 feet away from our homes.

So while our families see block after block of explosive crashes onto our sidewalks and into our homes; while we see rollover crashes into our front, back and side yards; while we see ejection fatality and pedestrian crash victims in front of our living room windows and brain matter on our streets and in our yards, what has DMD said, forever? "Nothing to see here.Your crash rates are fine."

A heads up, then, to you, Albuquerque Vision Zero, DMD, the Mayor, and the Mid Region Metropolitan Planning Organization (MR-MPO): if the crash conditions on a street make the people who live along it justifiably afraid to exist in their homes or stand in their yards or walk on their sidewalks, something is deeply wrong. *If you can't see that this is wrong because your crash statistics say there's no problem, well, clearly the problem is your use of statistics.*

So, Lead Coal is not, then, just another generic traffic calming problem. Consequently, as I've said before, it's unclear whether your conventional analysis and methodologies are relevant here. *You need to focus not on where else cars might go if CABQ does what's needed to protect us, you need to put a stop to where the cars are going now: across bike lanes, onto sidewalks, and into our homes.*

In addition to staying focused on what and where the problem is, I encourage you to be cognizant of your obvious built in bias here and to avoid unconsidered endorsement of what DMD is doing. Because *what our DMD has been doing on Lead from Washington to Yale –for decades– is beyond harmful. More of the same is not ok. Your job is not to "make it work." Your job is to make us safe.*

Instead of more of the same, it's time for thoughtful consideration of just what is reasonable to expect of our streets. *It's time for the Mayor and DMD to get real. They need to create a safe traffic plan for the narrow, residential side streets they have, not the high speed high volume*

roadway they wish they had and that DMD failed to build when they spent $32M to fix Lead Coal.

Also, I encourage you to avoid any appearance that your intention is to obfuscate what has happened on Lead-Coal. CABQ's actions on Lead-Coal, over decades, do, indeed, give the appearance of obfuscation and cover up even. You don't want to be perceived as enabling any such effort.

In that regard I'm providing as an attachment to this letter the 2010 NEPA document for the Lead and Coal Avenues Improvements Project (LCIP). The officially documented purpose of LCIP was to fix the crash problem that we are still dealing with. That's not what DMD told the USDOT and until explained otherwise, it appears this is how DMD evaded a road safety study for the project.

So, stay focused on what and where the problem is. And remember that even though DMD may be cutting the check for the Lead and Coal Studies, and for your next on-call project for them, your duty is to the public and specifically to the families who have made your study possible and who have made very clear what your study needs to be about.

Below is an image of the most recent high impact crash onto the sidewalk at the NE corner of Coal and Cornell. Be sure in your images for this project to include photos that exemplify the countless crash scenes like this outside our homes. You don't want to give the appearance of minimizing our problem.

Sincerely

Joseph Aguirre
Spokesperson, Lead Coal Safety Brigade

Attachment: Lead and Coal Avenues Improvements Project, 2010 NEPA document (in cover email) Alb Lead and Coal CE.PDF

Cc: Lee Engineering project staff; Mayor Tim Keller; City Councilor Nichole Rogers; DMD; state legislators; community members

Photos below: NE corner of Coal Avenue and Cornell Drive, December 2, 2024. Each crash like this risks injury and death for pedestrians on their way to the nearby University of New Mexico, Smith's supermarket, or Saggio's pizza. You don't need a pedestrian level of service or a threat index to see that this sidewalk -like, for the same reason, sidewalks all along Lead-Coal from Washington to Yale- is dangerous.

SPEED
LIMIT
30

Lead and Coal Studies Response Form - Public Meeting 1					
Question 1	Did you feel the presentation was clear?				
Question 2	If you answered No to the previous question, tell us your thoughts.				
Question 3	What are your thoughts on the study?				
Question 4	Do you want to be added to an email list for this project?				
Question 5	If you answered Yes to the previous question, please provide your name and email.				
No.	**Question 1**	**Question 2**	**Question 3**	**Question 4**	**Question 5**
1	No	Too many people weren't paying attention to what Greg said at the beginning (and what Don said at the end—that in order to enact ANY of the RSA recommendations, a traffic study was required	I was also confused by the data presented	Yes	Patricia Willson info@willsonstudio.com
2	Yes		I live between Lead and Coal. I am concerned about the safety aspects of a development planned for the corner of Silver and Wellesley, one block' north of Lead. It will be a 40 unit complex, with up to several bedrooms. In January 2023, the architect said that entry and exit to the property would be through the alley. If cars enter or exit this alley onto Lead, that will be hazardous since cars fly down the hill to try and make the light at Wellesley. Please contact the developer, Rex Cohen (rexcohen12@gmail.com), to get clarification. If this is not in your scope of work, please let me know who help clarify this. Thank you.	Yes	catherine.hubbard@gmail.com
3	Yes		I think some of the comparisons were flawed and should be discarded. More credible data, such as qualitative data from residents, should be used to inform decisions instead.	Yes	Carlos Michelen Strofer, c.michelen.strofer@gmail.com

Lead and Coal Studies Response Form - Public Meeting 2						
Timestamp	**Did you attend the public meeting?**	**If you answered No to the previous question, please provide your thoughts, comments, concerns, or questions.**	**If you answered yes to the first question, tell us your thoughts on the presentation material.**	**What kind of improvements would you like to see on Lead and Coal**	**Would you like to be added to an email list for this project?**	**If yes, please provide your contact information.**
2024/11/14 7:47:06 PM MST	Yes		Lots of data. Slides not super legible	Slower speeds, less traffic	Yes	info@willsonstudio.com
2024/11/14 7:48:27 PM MST	Yes		Great, clear info	Lower speed limit	Yes	maggie20silva@gmail.com
2024/11/14 8:43:13 PM MST	Yes		Very hard to see. But presenter well-versed.	Wow me. I don't have any major complaints with how it is now (except traffic light on Coal at CNM campus). Central is the bigger problem.	No	
2024/11/14 9:17:04 PM MST	Yes		The presentation was informative and relevant. I enjoyed it. Thanks! But the slides were difficult to see. Please make figure labels, etc, much larger font and visible colors. Better projector if possible.	One lane per direction: either one-lane one-way, or two-way conversion. Geometric changes to reduce speed: narrower lanes for sure, but also some of: traffic circles, curb extensions, raised sidewalks, etc. If one-lane one-way option: protected bike lane with low level of stress throughout the whole corridor and low level of stress at the intersections.	Yes	c.michelen.strofer@gmail.com
2024/11/14 9:35:21 PM MST	No	As a concerned Burqueno and someone who has lost family members lives to cars this city needs to do something about how our roads encourage drivers to speed, be reckless, and careless as they drive. It is cruel and unjust that as pedestrians and cyclists we must do everything correct: Wear high visibility clothing every night, do not listen to music, stay as close to the curb as possible, make eye contact with drivers through dark tinted windows before crossing and merging. All this so that drivers can be dangerous and careless behind their 2 ton death machines. Then when they eventually harm and kill people - the victims are always blamed for not doing more to protect themselves. So I have to comment, I have to speak up and go on the record at every opportunity and pleas to our city officials to stop building roads that kill us		Make these roads one way and 1-lane with a focus on geometric changes to calm drivers (e.g., narrower lanes, curb extensions, speed bumps, traffic circles, etc.) and physical barriers on bike lanes to protect cyclists and pedestrians. Our bodies don't come with air bags and crumple zones; painting lines is a very weak suggestion that drivers to pay attention and stay in their lane.	Yes	BryanDombrowski3@yahoo.com
2024/11/14 10:30:32 PM MST	No	a friend (who attended) gave a brief overview of meeting		slowed traffic, safer for bikes and pedestrians (protected bike lane) - a single lane might also help reduce the number of people turning the wrong way onto these roads - i see this all the time. better configuration for bikes crossing at I-25 (especially heading west)	Yes	sito.org+leadcoal@gmail.com
2024/11/15 2:38:28 PM MST	Yes		Material was very good but presentation of f it was difficult to see.	Slower/less traffic	Yes	Abqmetzner@gmail.com
2024/11/16 9:16:20 AM MST	Yes		It was a very informative presentation. I wasn't sure what to expect and was pleasantly surprised. A little more up front explanation of the goals of the work would be nice. I think many people would be interested in this information and would like to see more neighborhood participation. I just happened to be on Nicole Roger's email list (thank you very much to our new city councilor-good start!). I will be informing as many people as I can about the next meeting.	It seems like slowing down the traffic would do a lot to reduce the noise. I would walk on those streets more often if they weren't so noisy.	Yes	pfmetzner@gmail.com
2024/11/21 8:21:45 PM MST	No	My family is very happy the noise and lack of safety on Lead and Coal are being taken seriously. This corridor should be a quiet residential area and not an alternative highway. Would love to be able to ride in a safe and separate bike lane and get some relief from the noisy car traffic. Please include the corner of Columbia and Coal in your improvement plans!		Stop through traffic like at Columbia/Santa Clara. If that is too extreme, discourage the amount and noisiness with narrow lanes, speed bumps, traffic circles, or other physical barriers. Lights and signs are not enough to force drivers to slow down. Would also love a separate bike lane with barrier.	Yes	rose@dyer.me
2024/12/18 7:56:05 PM MST	Yes		Very good presentation, especially section on Enhanced Safety Options	While I appreciate Dr. Aguirre's comments about support for single lane option, I am very concerned about the impact on Garfield with that option	Yes	Already on list
2024/12/18 9:27:03 PM MST	Yes		Thanks for putting together the presentation! I'm concerned that more engaged community members are having an outsized influence on the project. Repeatedly, I heard that bicycle safety was not a priority. That might be true for the people in the room, but I think the neighborhoods have more diverse opinions. The people with time to engage in numerous public meetings and stakeholder engagement groups are not a representative sample of the constituency impacted by the study. Maybe just take their input with a grain of salt...	The enhanced safety measures were very thoughtful and potentially impactful ideas. In particular, I thought the bike lane delineators would help calm traffic, while adding additional protections for cyclists. The daylighting idea could be implemented with street side basins where runoff from streets could be used to water native vegetation. This would increase shade, decrease runoff, buffer noise, and calm traffic. Check out Tucson where they have adopted water harvesting chicanes throughout the entire city. The Silver Avenue Bike Blvd stops at the interstate (i.e., it suffers from a lack of connectivity). This is a big opportunity to better connect Nob Hill to downtown and the Rio Grande for cyclists.	Yes	justincjohnson2@gmail.com

Lead and Coal Studies Response Form - Public Meeting 3					
Timestamp	**Did you attend the public meeting held on December 18, 2024?**	**If you answered No to the previous question, please provide your thoughts, comments, concerns, or questions.**	**If you answered Yes to the first question, tell us your thoughts on the presented material.**	**Would you like to be added to an email list for this project?**	**If yes, please provide your contact information.**
2024/12/19 1:15:17 PM MST	Yes		I recommend the single lane option from Yale to Washington. It would be cheaper than trying to do the whole L/C corridor. It would be safer for pedestrians and cyclist, would eliminate drag racing, plowing down of trees and running up on sidewalks and into houses,walls, fences and peoples front yards. I'm sure there will also be a reduction in speeding.	Yes	tomsimic323@gmail.com
2025/01/06 2:01:06 PM MST	No	We operate a delivery business located on Lead. It is our opinion that reducing the flow of traffic to one lane in each direction would significantly and detrimentally impact our business operations. We are opposed to this proposal.		Yes	mike@advantage-av.com
2025/01/06 2:19:48 PM MST	No	I operate a warehouse on the corner of Elm and Lead all the way south to the corner of Elm and Coal. I live in the international district and routinely travel on Lead/Coal to get to and from work and to service my clients with n the surrounding area. There would be nothing but trouble in making Lead and Coal two way roads. The congestion would be astronomical and people would stop traffic to pull across lanes to get into their driveways and adjacent alleyways causing more accidents and more traffic. Homes sheltered on the leeward side would become victims of potential accidents. It doesnâ€™t even take an engineering firm to see that. What we need is better traffic control and more police presence. Chicanes might work, lane narrowing as well, but people speed and drive recklessly because there is no repercussion. How many unpaid speed cameras tickets are out there? And would we sacrifice some of the most used bike lanes for this pipe dream?		Yes	Kyle@certifiedusa.net
2025/01/08 8:24:54 PM MST	Yes		Solid presentation. Would have liked more stats showing that, despite the apocryphal stories, the stats show that there is not an unusual amount of speeding or crashes along Lead and Coal. Please do not make changes to a well-functioning thoroughfare, especially without consulting other neighborhoods that use Lead/Coal as a pass-through. Instead, it can be made safer through speed enforcement, clear striping and barriers in key places. Rest-in-red has already contributed to making it safer.	Yes	ja.montalbano@gmail.com

January 27, 2025

Paul Barricklow PE
Principal, Lee Engineering
Via Email

Tim Brown
Traffic Engineering Division Manager
Department of Municipal Development
City of Albuquerque
Via Email

RE Lead and Coal Studies: Road Safety and Standard of Care

As you head towards concluding the Lead and Coal Studies, I recommend that you make clear -and make clear in your final report- what the scope of work is regarding any examination of the safety of the Lead-Coal roadway (ie “road safety”). I also recommend that you make clear to the community what any relevant engineering standard of care may be regarding the need for a road safety study in this matter.

As I understand the scope of the Lead and Coal Studies, it does not look at whether the Lead-Coal roadway is safe: not in its entirety, not for any section, and not for any site-specific location.The study is blind to the question. It appears to assume, without stating such, that the roadway itself is safe.

If this is the case, then, I recommend you not represent in the study report that you have looked at the safety of the roadway. Your look at “comparable” roadways or your singling out of any specific feature of Lead-Coal between Washington St and Yale Blvd and citing that the same feature is found in other settings (for example that “homes on Indian School are also 15 feet away from the roadway”) does not constitute a road safety study.

If the current study does not itself look at the safety of the Lead-Coal roadway, I encourage you to refer to any previous examination of road safety, including -and specifically- for the section from Washington to Yale. In my 20 year experience as a citizen advocate for Lead-Coal no such study has ever been done.

Moreover, not only has a road study never been done, the City of Albuquerque (CABQ) and the Department of Municipal Development (DMD) have repeatedly evaded a road safety study of Lead-Coal: in the $32M federally funded Lead and Coal Avenues Improvements Project (safety document 2010); in the $120M federally funded Albuquerque Rapid Transit Project (safety document 2015); in Mayor Keller’s December 2019 cancellation of an already requested FHWA

Road Safety Audit (RSA) on Lead-Coal from Washington to Yale; and in the 2022 FHWA RSA which, as a “pedestrian” audit, precluded any look at conditions of the roadway.

It is demonstrably unsafe to operate a high volume, high speed roadway -to operate two lanes of busy traffic whether unidirectional or bidirectional- on our narrow residential side streets. If it is safe –if there’s nothing to hide– why has CABQ repeatedly evaded a full, unbiased look at road safety as a factor in the crash problem on our roadway section?

If the current study is not looking at road safety and there is no previous road safety study to refer to, you are then necessarily constrained in the scope of your final report. Your analysis must focus on and clearly state to what extent any mitigation measure will do what the FHWA to its credit made clear in its 2022 report is the purpose of this exercise: make Lead and Coal Avenues safe for the people who live, walk and bike alongside them. Or, to express that purpose in the vernacular: keep the damn cars on the road.

1. Absent a road safety study, you have no basis to conclude that for the roadway from Washington to Yale (the section of intense community concern since January 2018) the current traffic configuration –or even its tweaked, “enhanced safety” version– is safe. Again, it is demonstrably not.

2. Absent a road safety study, you have no basis to conclude that the bidirectional option would be safe, or safer than the current configuration. A priori, the significant sightline obstruction present all along the Washington to Yale section would be as bad or worse in a bidirectional configuration.

3. You do have a basis to conclude that the single lane option would, by many factors, best protect the safety of residents, pedestrians and bicyclists 24/7/365 along the Washington to Yale section.

4. Absent a road safety study, you have no basis to refute or dismiss the FHWA’s conclusion that a 25 mph speed limit -of course, strictly managed- is indicated to keep the cars on the road. And, you have no basis to refute the sustained, and well substantiated community recommendation for a 25 mph speed limit in the Washington to Yale section.

So, please, clarify your scope and adhere to it. You may reasonably acknowledge the absence of a road safety study. I strongly suggest you do so in your report. You may not imply that the roadway is safe and that the demolition derby outside our homes is just on the drivers. And, the conclusions in your report must be laser focused on what measures will work best to keep residents, pedestrians, and cyclists safe.

Finally, Lee Engineering (in this study) and DMD (in its decades long management of crash safety on Lead-Coal) give the appearance of treating a critical crash safety problem without an adequate diagnostic examination. What is the relevant engineering standard of care here? When is a “road safety” study indicated?

We all look forward to putting the Lead-Coal matter to rest, finally. Beyond a definitive safety solution, that will necessitate learning why it has taken CABQ decades to fix the problem. If a road safety study should have been done decades ago, the community deserves to know that.

Thank you for your work.

Sincerely,

Joseph Aguirre
Spokesperson, Lead Coal Safety Brigade

Cc: Jennifer Turner, JD: Director, DMD; Lisa Keefe, City Attorney; City Councilor Nichole Rogers; State Senator Antoinette Sedillo Lopez; State Representative Marianna Anaya; Community Members; Mayor Keller % Doug Small Director, Public Affairs

Photo: Coal Ave and Cornell Dr, notorious for high impact road departure crashes putting pedestrians and residents at risk of injury and death. Obvious significant impairment of the sightline of traffic approaching on Coal for drivers crossing on Cornell. *Don't put this dangerous intersection on the drivers: that sounds like a cover up.*

City of Albuquerque Public Meeting

Lead & Coal Studies

Heights Community Center | 823 Buena Vista Dr SE, Albuquerque, NM 87106

Feedback:
As a resident of Huning Highland, I definitely want traffic to be controlled, but I don't want to kill the downtown area.

Name: Janet Sykes Contact: janetazer@hotmail.com

SEP. 5
6-8pm

LEE ENGINEERING

City of Albuquerque Public Meeting

Lead & Coal Studies

Heights Community Center | 823 Buena Vista Dr SE, Albuquerque, NM 87106

Feedback:
I WAS SHNA REPRESENTATIVE with DON HANCOCK during the RICHARDSON Admission RE-DEVELOPMENT of LEAD/COAL. I WAS A PROPONENT FOR 2 WAYS but I FEEL NARROWING ELM AS WORKED OUT WELL.

Name: _____ Contact: _____

TOM OLKEN TWODESIGN@GMAIL.COM

SEP. 5
6-8pm

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	September 5, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Don Hancock	262-1862	sricdon@earthlink.net	C HA
GREG WEIRS		Vgweirs@gmail.com	NHNA
Janet Sykes		janetazer@hotmail.com	Huning Highlands
Sherry Smith	505 9677327	sherrouse@hotmail.com	~~ULA~~
C. Hubbard			NHNA
Laurel Schilke	505-243-8360	JustOnePlanet@hushmail.com	SNA
Peter Schilke	"	pschilke@gmail.com	"
Ana Rodriguez	(505) 250-0035	Ignnana@msn.com	Huning Highland
TOM OCKEN	505/248-1620	twodesign2@MAC.COM	SILVER HILL

24 Attendees

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	September 5, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Carlos Michelen	505-457-9120	C.michelen.strofer@gmail.com	Hunings Highlands
Patrick Martin	602 689 7272	patrick@bikeabq.org	Nob Hill
Josh Kefauver	651 434 0691	josh.kefauver@gmail.com	Nob Hill
Tabitha Hall	505-238-3873	tabithabikes@gmail.com	Nob Hill
Patty Willson	505-980-6007	info@willsonstudio.com	VHNA
RICH WILLSON	505-980-1469	rich@willsonstudio.com	VHNA
JAMES Martelbano	505 243 0827	ja.martelbano@gmail.	SHNA

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	September 5, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Paul Deneftch	505 2199655	pauldeneftclaw@gmail.	
Delilah Montoya	505 256 9290	dmontoya2@gmail.com	Heights
RALPH LOOMIS	5052062531		MILE HIGH
Kathy Davison	505-382-1943		university
Aaron Wilson	(505) 363-2192	tallest@gmail.com	South San Pedro
Sarah Gale	860-833-7396		Nob Hill
Nichole Rogers	768-3121	nrogers@cabq.gov	D6 City Council
Ellie Olive			Comanche

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	November 14, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Brooklyn Woods	(505)379-1152	bmwoods5785@gmail.com	Silver Hills
Nichole Rogers	505 349-0457	nrogers@cabq.gov	D6 Councilor South Las Altos
Joseph Aguilar		leadcoalsafetybrigade@gmail	VHA
Don Hancock	505-262-2053	sricdm@earthlink.net	VHA
Jody Grant		msjodygrant@gmail.com	Victory Hills
Patty Wilson	505 980 8007	info@wilsonstudio.com	VHNA
Rich Wilson	505 980 1469	rich@wilsonstudio.com	VHNA
Maggie Silva	505 918 8272	maggie20silva@gmail.com	VHNA
Greg Weirs	505 515 6334	vgweirs@gmail.com	NHNA
Paula Metzner	505-730-0388	pfmetzner@gmail.com	SEHN
* Bob Anderson	505 401 4707	citizen@comcast.net	NHNA
Carlos Michelen	505 457 9120	c.michelen.strofer@gmail	HHHDA

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	November 14, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Sherry Smith		sherraura@hotmail.com	UHA
Ted Cutler	505-260-1682	teddyman@gmail.com	Victory Hills
Lindsay Wood		lindsay3131@gmail.com	sycamore
Helen Metzner		abgmetzner@gmail.com	parkland
Julie Ahern Wild		wild@swcp.com	UHA
Richard Wild		"	"
JAMES MONTALBANO	243 0827	ja.montalbano@gmail.com	Silver Hill
Althea Atherton	978-660-9532	altheaa03@hotmail.com	Victory Hills

LEE ENGINEERING

LEAD AND COAL STUDIES PUBLIC MEETING

PROJECT:	Lead and Coal Studies	**MEETING DATE:**	December 18, 2024
FACILITATOR:	Lee Engineering	**LOCATION:**	Heights Community Center

NAME	PHONE	EMAIL	NEIGHBORHOOD
Rose DYER	5055467708	rose@dyer.me	Univ Heights
Joseph Aguirre			UHA
Dr. Peter Baker	505-206-4957	pmbdoc@yahoo.com	District Six
Teresa DeBacker	405-401-0781	profdebacker@gmail.com	Nob Hill
Gary Epstein	on file		
Don Hancock	505-262-1862	sricdon@earthlink.net	UNM
Patty Wilson	505-980-8007	info@wilsonstudio.com	VNNA
Rich Wilson			
Ziarra Kirksey	505-549-0451	Zkirksey@cabq.gov	D6
Justin Johnson	605-270-3201	justingjohnson2@gmail.com	D6
Rachel More-Hale			D6
SALLY BEERS	505 355 9217	shelly1648@yahoo.com	D6
Richard Hample	505 228 5464	hampledawg@yahoo.com	UNM
GREG WEIRS	505 515 6334	vgweirs@gmail.com	NHNA
M. Quintana	2066835524		
P. METZNER			

LEE ENGINEERING

Appendix E: HCM Output Sheets

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)	1	1		1								4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

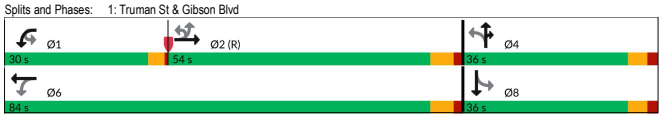
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	

Intersection Summary

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

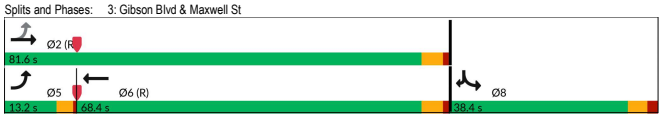
Intersection Summary

Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15			9	15
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	

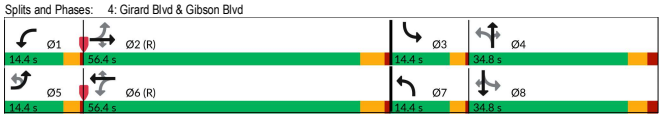
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary	

Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

Intersection Summary

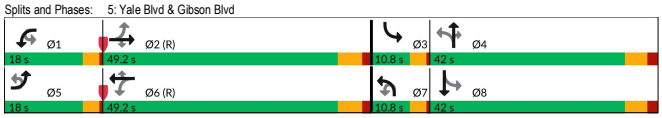
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

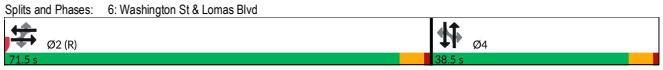
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 16.4		Intersection LOS: B	
Intersection Capacity Utilization 71.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



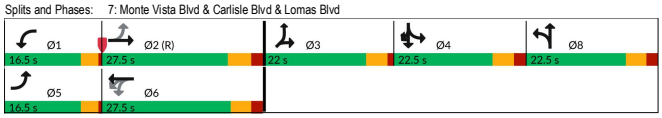
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			376	
Travel Time (s)	17.3			7.3	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			296	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

Intersection Summary

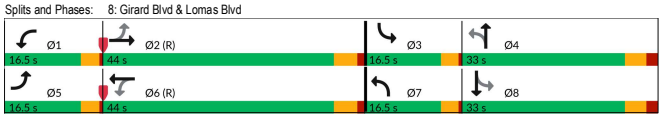
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.4		Intersection LOS: C	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

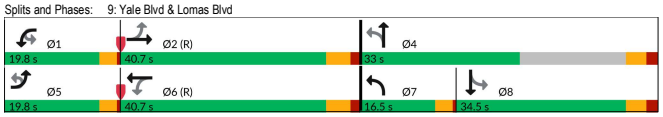
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08

Intersection Summary

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



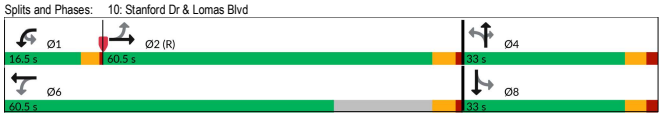
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

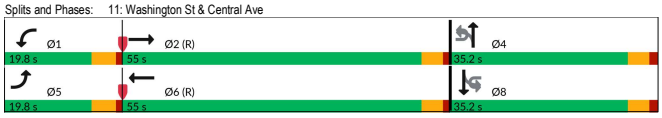
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	12	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	12	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			688			3147
Travel Time (s)		26.6				18.1			15.6			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	13	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	13	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.11	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		41.2	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		41.2	52.4		31.2	42.3
LOS	D	B			D	A		D	D		C	D
Approach Delay (s/veh)		16.5				10.3			51.5			41.2
Approach LOS		B				B			D			D
Queue Length 50th (ft)	18	25			12	56		8	106		12	119
Queue Length 95th (ft)	44	193			33	110		26	166		32	182
Internal Link Dist (ft)		1288				848			608			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.06	0.31		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 26.9		Intersection LOS: C	
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

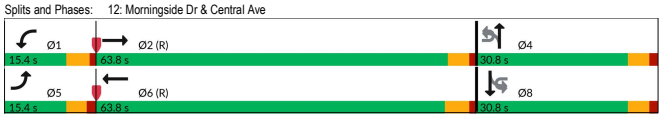
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	242	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	242	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998				0.999			0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1898	0	0	1832	0	0
Flt Permitted										0.936		
Satd. Flow (perm)	0	1878	1895	0	0	1886	1898	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	257	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	258	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.16			0.36		
Control Delay (s/veh)		44.9	2.3			50.0	2.8			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			50.0	2.8			49.7		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			4.4				3.3			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m12	70			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1586			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.16			0.12		

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 10.7		Intersection LOS: B	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	229	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	229	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	817	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	244	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	244	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

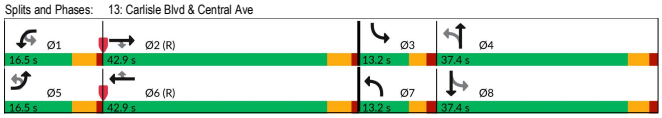
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.22	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.5	16.0	0.2		73.9	22.4	0.5	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.5	16.0	0.2		73.9	22.4	0.5	29.0	51.2		30.0
LOS		E	B	A		E	C	A	C	D		C
Approach Delay (s/veh)			21.5				28.7			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		30	78	0	12	123		19
Queue Length 95th (ft)		65	92	1		70	204	2	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.22	0.01	0.09	0.33		0.14

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay (s/veh): 35.6 Intersection LOS: D
Intersection Capacity Utilization 55.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	243	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	243	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996				0.999			0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1898	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1876	1891	0	0	1900	1898	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	259	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	260	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.15			0.17		
Control Delay (s/veh)		52.8	1.8			46.3	1.5			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			46.3	1.5			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				3.5			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			7	0			11		
Queue Length 95th (ft)		25	45			m29	27			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		185	1711			188	1721			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.15			0.05		

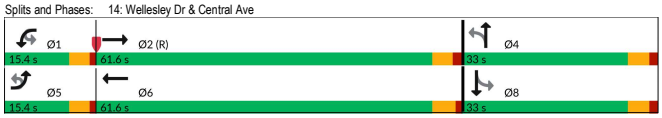
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.17	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	
Intersection Summary		

Intersection Signal Delay (s/veh): 6.5	Intersection LOS: A
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	229	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	229	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.996			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1891	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1891	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	244	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	251	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.15			0.18		
Control Delay (s/veh)		48.6	2.5			49.4	0.4			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			49.4	0.4			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.2			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			6	0			14		
Queue Length 95th (ft)		15	85			27	6			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1719			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.15			0.06		

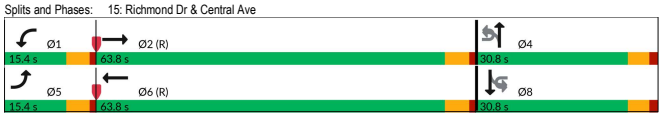
Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.18

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary

Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	300	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	300	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.987			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3554	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1530	3577	0	0	1886	3554	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				14			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	319	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	349	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.12			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.1			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	62			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		227	3070			257	2867			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.12			0.03		

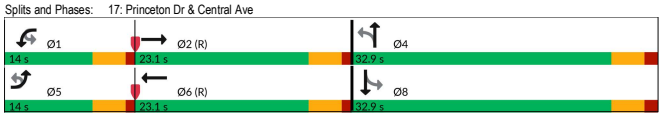
Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary	

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	318	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	318	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	338	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	343	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.11			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.5			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	57			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.11			0.04		0.01

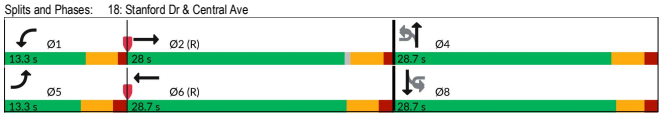
Intersection Summary	
Area Type:	Other
Cycle Length: 70.7	
Actuated Cycle Length: 70.7	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.13	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

Intersection Signal Delay (s/veh): 5.3	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



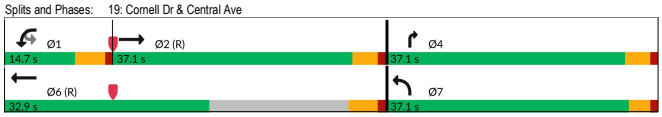
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	297	20	12
Future Volume (vph)	346	31	2	26	297	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	316	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	316	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.09	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				4.2	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	22	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.09	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.3	Intersection LOS: A
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	69	45	271	6	73	19	61	7	12
Future Volume (vph)	1	11	281	69	45	271	6	73	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.971			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3483	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.432			0.744	
Satd. Flow (perm)	0	1711	3483	0	1781	3596	0	813	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			24			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1232			105
Travel Time (s)			32.1			17.0			33.6			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	73	48	288	6	78	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	372	0	48	294	0	78	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	98.7		9.1	104.2		19.4	17.0	17.0	10.9	8.1
Actuated g/C Ratio		0.06	0.71		0.07	0.74		0.14	0.12	0.12	0.08	0.06
v/c Ratio		0.13	0.15		0.41	0.11		0.41	0.09	0.21	0.06	0.18
Control Delay (s/veh)		55.0	6.5		72.4	7.2		57.7	52.8	1.5	47.1	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.0	6.5		72.4	7.2		57.7	52.8	1.5	47.1	50.5
LOS		D	A		E	A		E	D	A	D	D
Approach Delay (s/veh)			8.2			16.4			34.7			49.6
Approach LOS			A			B			C			D
Queue Length 50th (ft)		10	66		43	33		62	15	0	5	11
Queue Length 95th (ft)		m28	88		85	80		109	43	0	19	39
Internal Link Dist (ft)			1332			670			1152			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2461		296	2677		240	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.15		0.16	0.11		0.33	0.04	0.13	0.04	0.05

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.41

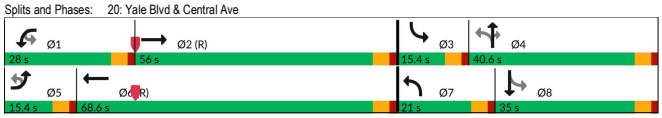
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Future Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.96	0.98		0.98	1.00		0.99
Frt			0.988				0.944			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1874	0	0	1805	3330	0	1805	5095	0	1805
Flt Permitted		0.348				0.221			0.530			0.247
Satd. Flow (perm)	0	656	1874	0	0	403	3330	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				95			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	232	20	4	36	215	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	252	0	0	40	343	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

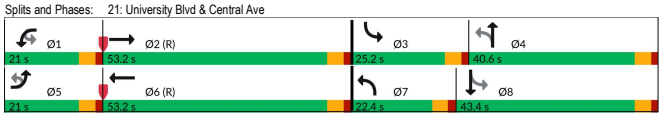
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.8			19.9	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.42	0.26			0.70	0.18		0.14	0.69		0.49
Control Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.4				22.0			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	130			37	19		20	139		86
Queue Length 95th (ft)		57	237			81	73		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		84	976			61	1954		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.35	0.26			0.66	0.18		0.09	0.34		0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	
Intersection Summary		

Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Future Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93		0.95		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.610				0.564			0.950			
Satd. Flow (perm)	0	1081	1900	1538	0	1061	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							763	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	249	265	6	60	240	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	249	265	0	66	240	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.18	0.23		0.08	0.16		0.32		0.02	
Control Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			4.4				4.5			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	61	0		10	37		46		0	
Queue Length 95th (ft)		3	99	28		20	90		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		974	1351	1170		909	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.18	0.23		0.07	0.16		0.15		0.02	

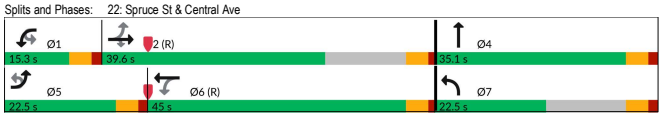
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	330	24	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	330	24	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	120		0	128		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.990			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3567	0	1805	1856	0	1805	1734
Flt Permitted		0.499			0.548			0.693			0.711	
Satd. Flow (perm)	0	941	3610	1568	1037	3567	0	1314	1856	0	1350	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		10			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			323			403			427			373
Travel Time (s)			7.3			9.2			9.7			8.5
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	351	26	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

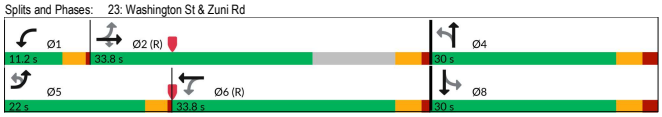
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	39.4%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		70.1	68.7	68.7	66.4	63.1		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.77	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.12	0.01	0.01	0.14		0.22	0.34		0.14	0.43
Control Delay (s/veh)		2.5	3.2	0.0	2.4	4.9		38.4	35.7		36.2	25.0
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.2	0.0	2.4	4.9		38.4	35.7		36.2	25.0
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			2.9			4.9			36.5			26.9
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	16	0	1	31		16	31		10	24
Queue Length 95th (ft)		18	47	0	3	56		41	69		30	68
Internal Link Dist (ft)			243			323			347			293
Turn Bay Length (ft)		300		300	120			128			100	
Base Capacity (vph)		958	2891	1270	906	2624		375	537		385	532
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.12	0.01	0.01	0.14		0.08	0.13		0.05	0.19

Intersection Summary	
Area Type:	Other
Cycle Length: 85.8	
Actuated Cycle Length: 85.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 9.7	Intersection LOS: A
Intersection Capacity Utilization 43.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

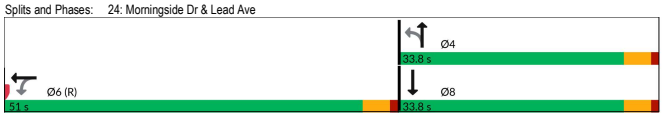


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	441	6	10	12	0	0	11	38
Future Volume (vph)	0	0	0	2	441	6	10	12	0	0	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.998						0.896	
Flt Protected								0.978				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1858	0	0	1681	0
Flt Permitted								0.921				
Satd. Flow (perm)	0	0	0	0	3602	0	0	1750	0	0	1681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			533			60			347	
Travel Time (s)		2.2			12.1			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	2	469	6	11	13	0	0	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	477	0	0	24	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.24			0.04			0.09	
Control Delay (s/veh)					10.3			18.8			8.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.3			18.8			8.8	
LOS					B			B			A	
Approach Delay (s/veh)					10.3			18.8			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					64			8			4	
Queue Length 95th (ft)					91			25			27	
Internal Link Dist (ft)		15			453			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1976			604			606	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.24			0.04			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 34.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



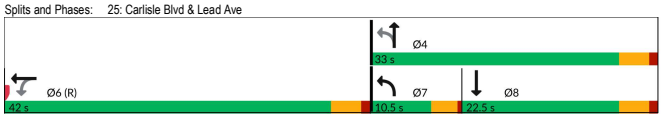
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	468	17	87	149	0	0	161	36
Future Volume (vph)	0	0	0	33	468	17	87	149	0	0	161	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.995						0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3579	0	1805	1900	0	0	1852	0
Flt Permitted					0.997		0.342					
Satd. Flow (perm)	0	0	0	0	3579	0	650	1900	0	0	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	35	498	18	93	159	0	0	171	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	551	0	93	159	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.3		21.7	20.7			12.4	
Actuated g/C Ratio					0.60		0.29	0.28			0.17	
v/c Ratio					0.25		0.33	0.30			0.66	
Control Delay (s/veh)					8.4		12.5	15.1			36.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					8.4		12.5	15.1			36.8	
LOS					A		B	B			D	
Approach Delay (s/veh)					8.4			14.1			36.8	
Approach LOS					A			B			D	
Queue Length 50th (ft)					60		10	23			86	
Queue Length 95th (ft)					103		28	38			141	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2166		295	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.25		0.32	0.22			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 15.7		Intersection LOS: B	

Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	352	71	0	0	0	0	201	38	13	179	0
Future Volume (vph)	37	352	71	0	0	0	0	201	38	13	179	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.977						0.979				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	3500	0	0	0	0	0	1856	0	1805	1900	0
Flt Permitted		0.996								0.371		
Satd. Flow (perm)	0	3499	0	0	0	0	0	1856	0	705	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	374	76	0	0	0	0	214	40	14	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	489	0	0	0	0	0	254	0	14	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	10	
Detector 1 Position(ft)	0	0						0		0	10	
Detector 1 Size(ft)	20	6						10		10	0	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

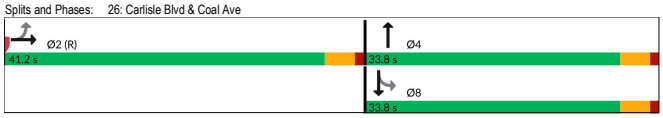
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3		14.3	14.3	
Actuated g/C Ratio		0.69						0.19		0.19	0.19	
v/c Ratio		0.20						0.70		0.11	0.53	
Control Delay (s/veh)		4.6						36.3		41.5	48.1	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		4.6						36.3		41.5	48.1	
LOS		A						D		D	D	
Approach Delay (s/veh)		4.6						36.3			47.6	
Approach LOS		A						D			D	
Queue Length 50th (ft)		32						105		7	96	
Queue Length 95th (ft)		64						161		m17	160	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2425						734		275	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.20						0.35		0.05	0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 22.4	Intersection LOS: C
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	400	0	0	0	0	0	9	6	4	9	0
Future Volume (vph)	9	400	0	0	0	0	0	9	6	4	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.949				
Flt Protected		0.999									0.986	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1803	0	0	1873	0
Flt Permitted		0.999									0.986	
Satd. Flow (perm)	0	3606	0	0	0	0	0	1803	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			738			657			532	
Travel Time (s)		31.0			16.8			14.9			12.1	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	426	0	0	0	0	0	10	6	4	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	436	0	0	0	0	0	16	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

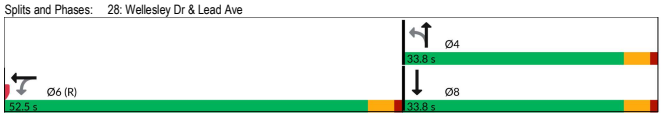
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.6%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	635	7	22	16	0	0	11	13
Future Volume (vph)	0	0	0	6	635	7	22	16	0	0	11	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.998						0.927	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	3601	0	0	1847	0	0	1742	0
Flt Permitted								0.885				
Satd. Flow (perm)	0	0	0	0	3601	0	0	1682	0	0	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	6	676	7	23	17	0	0	12	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	689	0	0	40	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.34			0.07			0.04	
Control Delay (s/veh)					11.1			19.8			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.1			19.8			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					11.1			19.8			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					100			15			4	
Queue Length 95th (ft)					135			36			21	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					2003			571			600	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.34			0.07			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization	39.6%	ICU Level of Service A	
Analysis Period (min)	15		

Splits and Phases: 28: Wellesley Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	528	6	0	0	0	0	6	4	5	5	0
Future Volume (vph)	14	528	6	0	0	0	0	6	4	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.998						0.946				
Flt Protected		0.999									0.976	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1788	0	0	1854	0
Flt Permitted		0.999									0.942	
Satd. Flow (perm)	0	3598	0	0	0	0	0	1788	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	562	6	0	0	0	0	6	4	5	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	583	0	0	0	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	
v/c Ratio		0.29						0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		10.6						15.7			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		10.6						15.7			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		10.6						15.7			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		82						2			4	
Queue Length 95th (ft)		112						13			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2002						609			607	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.29						0.02			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			

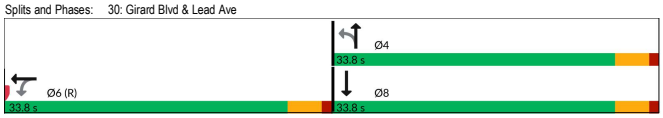
Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	587	31	45	132	0	0	96	50
Future Volume (vph)	0	0	0	26	587	31	45	132	0	0	96	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			1.00	
Frt					0.993						0.954	
Flt Protected					0.998			0.987				
Satd. Flow (prot)	0	0	0	0	3574	0	0	1875	0	0	1804	0
Flt Permitted					0.998			0.874				
Satd. Flow (perm)	0	0	0	0	3574	0	0	1660	0	0	1804	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9						49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	28	624	33	48	140	0	0	102	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	685	0	0	188	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.4			12.2			12.2	
Actuated g/C Ratio					0.69			0.18			0.18	
v/c Ratio					0.28			0.63			0.42	
Control Delay (s/veh)					4.9			34.5			19.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					4.9			34.5			19.6	
LOS					A			C			B	
Approach Delay (s/veh)					4.9			34.5			19.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)					45			73			39	
Queue Length 95th (ft)					87			121			79	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					2455			719			809	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.28			0.26			0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

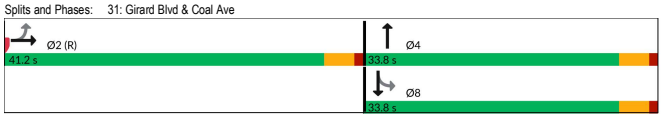


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	432	24	0	0	0	0	139	29	18	99	0
Future Volume (vph)	38	432	24	0	0	0	0	139	29	18	99	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993						0.977				
Flt Protected		0.996									0.992	
Satd. Flow (prot)	0	3566	0	0	0	0	0	1852	0	0	1885	0
Flt Permitted		0.996									0.929	
Satd. Flow (perm)	0	3566	0	0	0	0	0	1852	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	460	26	0	0	0	0	148	31	19	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	526	0	0	0	0	0	179	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		54.5						11.5			11.5	
Actuated g/C Ratio		0.73						0.15			0.15	
v/c Ratio		0.20						0.60			0.46	
Control Delay (s/veh)		11.9						34.9			33.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		11.9						34.9			33.7	
LOS		B						C			C	
Approach Delay (s/veh)		11.9						34.9			33.7	
Approach LOS		B						C			C	
Queue Length 50th (ft)		84						71			54	
Queue Length 95th (ft)		150						122			95	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2595						733			689	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.24			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 20.1		Intersection LOS: C	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave

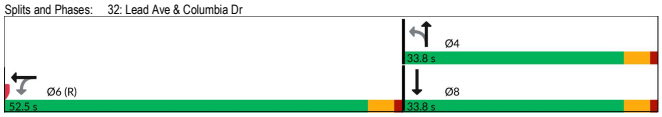


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	787	15	21	8	0	0	7	21
Future Volume (vph)	0	0	0	15	787	15	21	8	0	0	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.898	
Flt Protected					0.999			0.966				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1835	0	0	1706	0
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1644	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	837	16	22	9	0	0	7	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	869	0	0	31	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.43			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					12.0			19.7			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.0			19.7			10.2	
LOS					B			B			B	
Approach Delay (s/veh)					12.0			19.7			10.2	
Approach LOS					B			B			B	
Queue Length 50th (ft)					134			11			3	
Queue Length 95th (ft)					177			30			20	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					2000			558			593	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.43			0.06			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Lead Ave & Columbia Dr

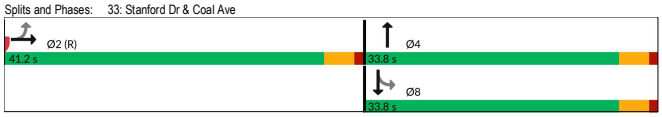


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	511	6	0	0	0	0	4	8	5	4	0
Future Volume (vph)	18	511	6	0	0	0	0	4	8	5	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.998						0.907				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	3595	0	0	0	0	0	1702	0	0	1849	0
Flt Permitted		0.998									0.939	
Satd. Flow (perm)	0	3594	0	0	0	0	0	1702	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						9				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	544	6	0	0	0	0	4	9	5	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	569	0	0	0	0	0	13	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.32						0.02			0.01	
Control Delay (s/veh)		12.2						9.7			14.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		12.2						9.7			14.1	
LOS		B						A			B	
Approach Delay (s/veh)		12.2						9.7			14.1	
Approach LOS		B						A			B	
Queue Length 50th (ft)		79						1			3	
Queue Length 95th (ft)		112						11			11	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1759						670			696	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.32						0.02			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



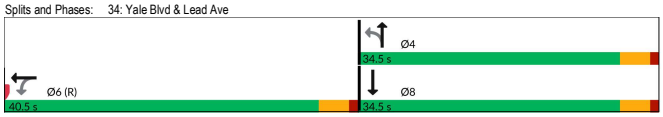
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	88	663	15	67	104	0	0	71	24
Future Volume (vph)	0	0	0	88	663	15	67	104	0	0	71	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.997							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3595	0	1805	1900	0	0	1881	1615
Flt Permitted				0.950			0.708					
Satd. Flow (perm)	0	0	0	1752	3595	0	1342	1900	0	0	1881	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4							87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	4		4	14		14	2		2	1		1
Confl. Bikes (#/hr)			3			6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	94	705	16	71	111	0	0	76	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	94	721	0	71	111	0	0	76	26
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				59.3	59.3		10.1	10.1			10.1	75.0
Actuated g/C Ratio				0.79	0.79		0.13	0.13			0.13	1.00
v/c Ratio				0.07	0.25		0.39	0.43			0.30	0.02
Control Delay (s/veh)				3.1	3.2		35.5	34.6			31.6	0.0
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				3.1	3.2		35.5	34.6			31.6	0.0
LOS				A	A		D	C			C	A
Approach Delay (s/veh)					3.2			35.0			23.5	
Approach LOS					A			C			C	
Queue Length 50th (ft)				9	41		31	49			33	0
Queue Length 95th (ft)				24	74		65	90			67	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1385	2842		536	760			752	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.07	0.25		0.13	0.15			0.10	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Intersection Signal Delay (s/veh): 10.3	Intersection LOS: B
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 34: Yale Blvd & Lead Ave



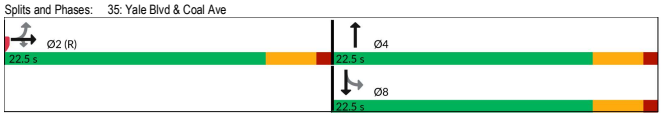
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	347	37	0	0	0	0	155	136	14	148	0
Future Volume (vph)	26	347	37	0	0	0	0	155	136	14	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98							1.00		
Frt			0.850					0.937				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1780	0	1805	1900	0
Flt Permitted	0.950									0.438		
Satd. Flow (perm)	1805	3610	1577	0	0	0	0	1780	0	831	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			39					117				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	369	39	0	0	0	0	165	145	15	157	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	369	39	0	0	0	0	310	0	15	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	25.0	25.0	25.0					11.0		11.0	11.0	
Actuated g/C Ratio	0.56	0.56	0.56					0.24		0.24	0.24	
v/c Ratio	0.03	0.18	0.04					0.59		0.07	0.34	
Control Delay (s/veh)	6.1	6.0	3.0					13.5		12.0	15.0	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	6.1	6.0	3.0					13.5		12.0	15.0	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		5.8						13.5			14.8	
Approach LOS		A						B			B	
Queue Length 50th (ft)	3	20	0					43		3	34	
Queue Length 95th (ft)	13	47	11					83		11	59	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	1002	2004	892					782		332	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.03	0.18	0.04					0.40		0.05	0.21	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 10.1	Intersection LOS: B
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

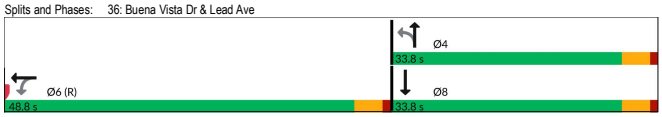


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Future Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.999						0.910	
Flt Protected					0.999			0.957				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1818	0	0	1729	0
Flt Permitted					0.999			0.826				
Satd. Flow (perm)	0	0	0	0	3602	0	0	1569	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7			3			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	17	850	4	32	4	0	0	6	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	871	0	0	36	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.45			0.06			0.03	
Control Delay (s/veh)					12.6			18.1			11.3	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.6			18.1			11.3	
LOS					B			B			B	
Approach Delay (s/veh)					12.6			18.1			11.3	
Approach LOS					B			B			B	
Queue Length 50th (ft)					135			12			2	
Queue Length 95th (ft)					180			32			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1932			556			621	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.45			0.06			0.03	

Intersection Summary	
Area Type:	Other
Cycle Length: 82.6	
Actuated Cycle Length: 82.6	
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay (s/veh): 12.8	Intersection LOS: B
Intersection Capacity Utilization 38.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 36: Buena Vista Dr & Lead Ave

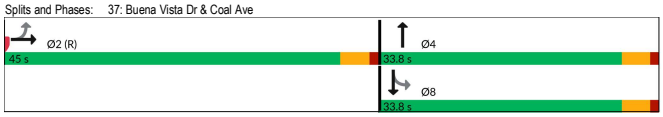


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Future Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.985						0.970				
Flt Protected		0.998									0.984	
Satd. Flow (prot)	0	3536	0	0	0	0	0	1837	0	0	1870	0
Flt Permitted		0.998									0.878	
Satd. Flow (perm)	0	3533	0	0	0	0	0	1837	0	0	1665	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22						6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	24	473	55	0	0	0	0	21	6	10	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	552	0	0	0	0	0	27	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		20	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		20	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		72.0						8.0			8.0	
Actuated g/C Ratio		0.91						0.10			0.10	
v/c Ratio		0.17						0.14			0.18	
Control Delay (s/veh)		1.2						29.1			35.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.2						29.1			35.2	
LOS		A						C			D	
Approach Delay (s/veh)		1.2						29.1			35.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						10			14	
Queue Length 95th (ft)		35						33			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		3230						686			619	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.17						0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 31.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



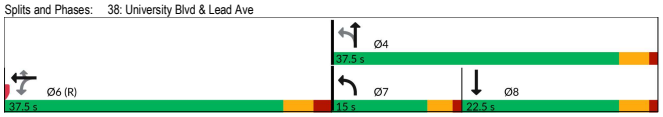
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Future Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850					0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3599	1615	1805	5187	0	0	5057	0
Flt Permitted					0.997		0.481					
Satd. Flow (perm)	0	0	0	0	3599	1589	914	5187	0	0	5057	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113					52	
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		48.6			22.7			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	53	722	113	34	216	0	0	272	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	775	113	34	216	0	0	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6		6	4					
Detector Phase				6	6	6	7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0			8.0	
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%			30.0%	
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0			18.0	
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5			3.5	
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)					5.5	5.5	4.0	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	Max			Max	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				23.0	23.0	23.0		10.0			10.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)					32.0	32.0	33.5	33.0			29.1	
Actuated g/C Ratio					0.43	0.43	0.45	0.44			0.39	
v/c Ratio					0.50	0.15	0.07	0.09			0.16	
Control Delay (s/veh)					17.2	3.5	12.2	12.4			13.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)					17.2	3.5	12.2	12.4			13.8	
LOS					B	A	B	B			B	
Approach Delay (s/veh)					15.4			12.4			13.8	
Approach LOS					B			B			B	
Queue Length 50th (ft)					133	0	9	20			26	
Queue Length 95th (ft)					183	27	23	33			54	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1535	742	538	2282			1996	
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.50	0.15	0.06	0.09			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			

Intersection Signal Delay (s/veh): 14.6	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



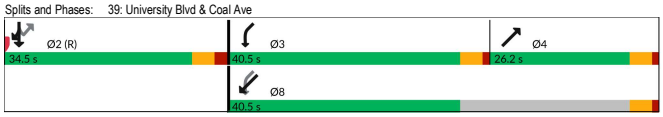
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Future Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.564		
Satd. Flow (perm)	0	0	0	1802	3610	1615	0	5187	1586	1070	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109			124			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		3.0	8.0	
Minimum Split (s)				44.5	44.5	44.5		26.5		26.5	40.5	
Total Split (s)				34.5	34.5	34.5		26.2		40.5	40.5	
Total Split (%)				34.1%	34.1%	34.1%		25.9%		40.0%	40.0%	
Maximum Green (s)				29.0	29.0	29.0		21.7		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				2.0	2.0	2.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				5.5	5.5	5.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		1.5	2.0	
Recall Mode				C-Max	C-Max	C-Max		None		None	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		0.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		10.0		0.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				29.0	29.0	29.0		54.2	101.2	62.2	62.2	
Actuated g/C Ratio				0.29	0.29	0.29		0.54	1.00	0.61	0.61	
v/c Ratio				0.08	0.44	0.20		0.08	0.05	0.08	0.08	
Control Delay (s/veh)				27.0	31.2	6.4		12.1	0.1	8.1	8.0	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				27.0	31.2	6.4		12.1	0.1	8.1	8.0	
LOS				C	C	A		B	A	A	A	
Approach Delay (s/veh)					26.5			9.1			8.0	
Approach LOS					C			A			A	
Queue Length 50th (ft)				19	127	0		24	0	13	23	
Queue Length 95th (ft)				46	174	39		38	0	27	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				516	1034	540		2779	1586	919	3188	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.08	0.44	0.20		0.08	0.05	0.06	0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.44	

Intersection Signal Delay (s/veh): 17.6	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

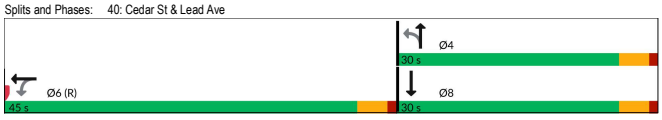


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Future Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.993						0.880	
Flt Protected					0.999			0.997				
Satd. Flow (prot)	0	0	0	0	3577	0	0	1894	0	0	1650	0
Flt Permitted					0.999			0.981				
Satd. Flow (perm)	0	0	0	0	3576	0	0	1864	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					10						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	830	41	10	179	0	0	15	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	889	0	0	189	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	10			10	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.8			12.2			12.2	
Actuated g/C Ratio					0.72			0.16			0.16	
v/c Ratio					0.35			0.63			0.36	
Control Delay (s/veh)					4.3			38.1			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					4.3			38.1			9.9	
LOS					A			D			A	
Approach Delay (s/veh)					4.3			38.1			9.9	
Approach LOS					A			D			A	
Queue Length 50th (ft)					52			83			6	
Queue Length 95th (ft)					95			135			47	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2568			633			638	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.35			0.30			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

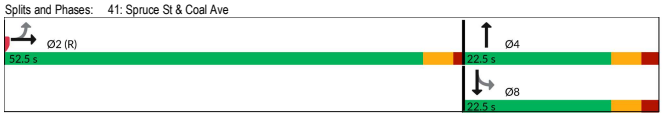


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Future Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.946				
Flt Protected		0.998									0.980	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1787	0	0	1862	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	3598	0	0	0	0	0	1787	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	663	3	0	0	0	0	3	2	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	694	0	0	0	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		20	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.20						0.03			0.06	
Control Delay (s/veh)		0.9						26.2			31.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						26.2			31.0	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						26.2			31.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			5	
Queue Length 95th (ft)		52						11			20	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3425						406			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 1.6		Intersection LOS: A	
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



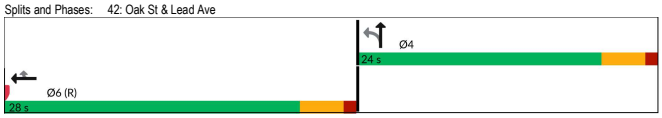
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Future Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						122	105					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					28.8	28.8	14.2	14.2				
Actuated g/C Ratio					0.55	0.55	0.27	0.27				
v/c Ratio					0.16	0.56	0.18	0.63				
Control Delay (s/veh)					6.6	9.4	4.1	19.1				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.6	9.4	4.1	19.1				
LOS					A	A	A	B				
Approach Delay (s/veh)					8.1			16.9				
Approach LOS					A			B				
Queue Length 50th (ft)					22	63	0	87				
Queue Length 95th (ft)					43	173	23	112				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2872	933	742	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.16	0.56	0.14	0.46				

Intersection Summary			
Area Type:	Other		
Cycle Length: 52			
Actuated Cycle Length: 52			
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Future Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.958				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	4951	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	4951	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	387							51				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	433	911	0	0	0	0	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	433	911	0	0	0	0	0	418	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	24.9	24.9						10.1				
Actuated g/C Ratio	0.55	0.55						0.22				
v/c Ratio	0.37	0.46						0.36				
Control Delay (s/veh)	2.1	7.0						13.8				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	2.1	7.0						13.8				
LOS	A	A						B				
Approach Delay (s/veh)		5.4						13.8				
Approach LOS		A						B				
Queue Length 50th (ft)	5	62						29				
Queue Length 95th (ft)	34	99						48				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	1170	1994						1902				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.37	0.46						0.22				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	

Intersection Signal Delay (s/veh): 7.4	Intersection LOS: A
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

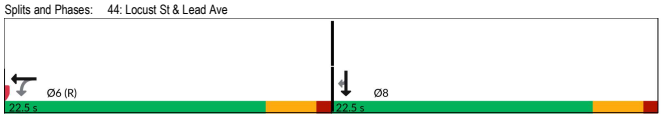
Splits and Phases: 43: Oak St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Future Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.972	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3361	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3361	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				74							68	237
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	74	468	0	0	0	0	0	576	441
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	0	0	74	468	0	0	0	0	0	708	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				20.2	20.2						15.8	15.8
Actuated g/C Ratio				0.45	0.45						0.35	0.35
v/c Ratio				0.09	0.29						0.58	0.46
Control Delay (s/veh)				3.2	9.2						12.3	5.5
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				3.2	9.2						12.3	5.5
LOS				A	A						B	A
Approach Delay (s/veh)					8.4						10.2	
Approach LOS					A						B	
Queue Length 50th (ft)				0	40						64	12
Queue Length 95th (ft)				17	67						102	53
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)				850	1619						1385	730
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.29						0.51	0.42

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

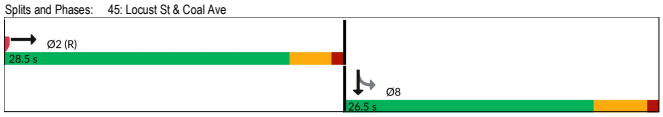


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Future Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00								1.00	1.00	
Frt		0.988										
Flt Protected										0.950	0.963	
Satd. Flow (prot)	0	5110	0	0	0	0	0	0	0	1643	3330	0
Flt Permitted										0.950	0.963	
Satd. Flow (perm)	0	5110	0	0	0	0	0	0	0	1641	3328	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		31								110	110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	756	63	0	0	0	0	0	0	591	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	295	390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										8		
Detector Phase		2								8	8	
Switch Phase												
Minimum Initial (s)		10.0								10.0	10.0	
Minimum Split (s)		28.5								26.5	26.5	
Total Split (s)		28.5								26.5	26.5	
Total Split (%)		51.8%								48.2%	48.2%	
Maximum Green (s)		24.0								21.0	21.0	
Yellow Time (s)		3.5								4.5	4.5	
All-Red Time (s)		1.0								1.0	1.0	
Lost Time Adjust (s)		0.0								0.0	0.0	
Total Lost Time (s)		4.5								5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0								2.0	2.0	
Recall Mode		C-Max								None	None	
Walk Time (s)		7.0								7.0	7.0	
Flash Don't Walk (s)		13.0								10.0	10.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		31.7								13.3	13.3	
Actuated g/C Ratio		0.58								0.24	0.24	
v/c Ratio		0.28								0.61	0.44	
Control Delay (s/veh)		6.6								16.5	13.3	
Queue Delay		0.0								0.0	0.0	
Total Delay (s/veh)		6.6								16.5	13.3	
LOS		A								B	B	
Approach Delay (s/veh)		6.6									14.6	
Approach LOS		A									B	
Queue Length 50th (ft)		37								59	43	
Queue Length 95th (ft)		78								107	62	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)												
Base Capacity (vph)		2954								694	1338	
Starvation Cap Reductn		0								0	0	
Spillback Cap Reductn		0								0	0	
Storage Cap Reductn		0								0	0	
Reduced v/c Ratio		0.28								0.43	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 10.3		Intersection LOS: B	
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave

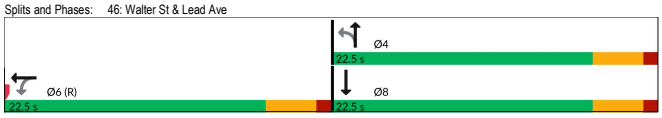


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Future Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.923	
Flt Protected					0.999			0.964				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1832	0	0	1740	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3602	0	0	1900	0	0	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2				2		2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	22	932	6	14	5	0	0	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	960	0	0	19	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.29			0.06			0.02	
Control Delay (s/veh)					1.9			19.6			12.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.9			19.6			12.6	
LOS					A			B			B	
Approach Delay (s/veh)					1.9			19.6			12.6	
Approach LOS					A			B			B	
Queue Length 50th (ft)					0			4			1	
Queue Length 95th (ft)					112			19			8	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3330			760			698	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.03			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 2.4		Intersection LOS: A	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Walter St & Lead Ave



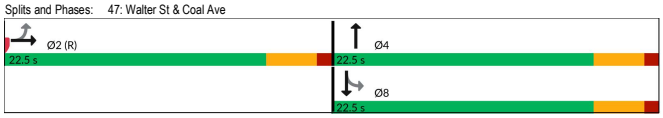
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Future Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.890				
Flt Protected											0.985	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1671	0	0	1872	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1671	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						27				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	651	4	0	0	0	0	6	27	4	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	0	0	0	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.20						0.10			0.04	
Control Delay (s/veh)		1.4						9.5			18.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						9.5			18.1	
LOS		A						A			B	
Approach Delay (s/veh)		1.4						9.5			18.1	
Approach LOS		A						A			B	
Queue Length 50th (ft)		0						1			3	
Queue Length 95th (ft)		50						18			m12	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						684			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Future Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3574	1615	0	1805	3610	0	0	3574
Flt Permitted				0.950				0.480				
Satd. Flow (perm)	0	0	0	1801	3574	1583	0	912	3610	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						84						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	0	0	43	769	129	2	69	526	0	0	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	43	769	129	0	71	526	0	0	350
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			1
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			10
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			10
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	79
Future Volume (vph)	79
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1588
Right Turn on Red	Yes
Satd. Flow (RTOR)	84
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	84
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	10
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	10
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (%)				35.0%	35.0%	35.0%	29.0%	29.0%	36.0%			36.0%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	35.1			35.1
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		39.2	35.1			35.1
Actuated g/C Ratio				0.53	0.53	0.53		0.36	0.32			0.32
v/c Ratio				0.04	0.40	0.15		0.20	0.46			0.31
Control Delay (s/veh)				13.5	16.6	6.0		5.9	11.1			29.2
Queue Delay				0.0	0.0	0.0		0.0	0.1			0.0
Total Delay (s/veh)				13.5	16.6	6.0		5.9	11.3			29.2
LOS				B	B	A		A	B			C
Approach Delay (s/veh)					15.0				10.6			24.8
Approach LOS					B				B			C
Queue Length 50th (ft)				15	168	15		7	43			97
Queue Length 95th (ft)				33	216	46		13	55			137
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				956	1899	880		740	1151			1140
Starvation Cap Reductn				0	0	0		0	109			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.04	0.40	0.15		0.10	0.50			0.31

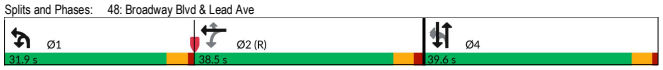
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.15
Control Delay (s/veh)	6.5
Queue Delay	0.0
Total Delay (s/veh)	6.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	35
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	563
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 15.8	Intersection LOS: B
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Future Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130	100		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.97						0.99			
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	1787	3610	0
Flt Permitted	0.950									0.359		
Satd. Flow (perm)	1790	3610	1573	0	0	0	0	3610	1595	675	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64						69			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		475			1105			421			359	
Travel Time (s)		10.8			25.1			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		2						4		1	4	
Permitted Phases	2		2						4	4		
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	39.0%	
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	37.9	
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	7.0	
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9	61.4	37.9	
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34	0.56	0.34	
v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	
Control Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
LOS	C	C	A					C	A	A	A	
Approach Delay (s/veh)		29.6						26.4			6.9	
Approach LOS		C						C			A	
Queue Length 50th (ft)	34	159	0					148	0	4	20	
Queue Length 95th (ft)	69	211	30					198	30	16	28	
Internal Link Dist (ft)		395			1025			341			279	
Turn Bay Length (ft)			200						130	100		
Base Capacity (vph)	554	1119	531					1243	594	609	1243	
Starvation Cap Reductn	0	0	0					0	0	0	0	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	9	244
Future Volume (vph)	24	34	1	363	9	9	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.998
Satd. Flow (prot)	1715	0	0	1894	0	0	1896
Flt Permitted	0.979						0.998
Satd. Flow (perm)	1715	0	0	1894	0	0	1896
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	10	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	270
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	6	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	6	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.949			0.971			0.996			0.995	
Flt Protected		0.982			0.989			0.997			0.998	
Satd. Flow (prot)	0	1736	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.982			0.989			0.997			0.998	
Satd. Flow (perm)	0	1736	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	6	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	6	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	6	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.932			0.975			0.998			0.998	
Flt Protected		0.987			0.978		0.950			0.950		
Satd. Flow (prot)	0	1748	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.987			0.978		0.950			0.950		
Satd. Flow (perm)	0	1748	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2				2		2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	6	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	7	12	11	7	1
Future Volume (vph)	1	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.882			0.983		
Flt Protected	0.994			0.975		
Satd. Flow (prot)	1666	0	0	1852	1868	0
Flt Permitted	0.994			0.975		
Satd. Flow (perm)	1666	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

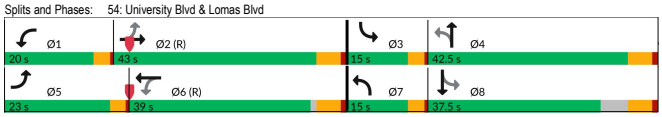
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary
Area Type: Other
Cycle Length: 120.5
Actuated Cycle Length: 120.5
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 29.3 Intersection LOS: C
Intersection Capacity Utilization 93.8% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

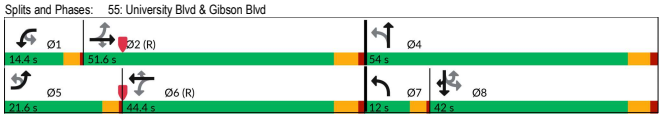
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay (s/veh): 20.3 Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	201	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	201	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.988			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3560	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3560	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	214	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	232	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.18		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	26.4		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	26.4		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.2			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	62		17	161			16
Queue Length 95th (ft)		#219	161	0	33	93		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1270		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.18		0.11	0.54			0.12

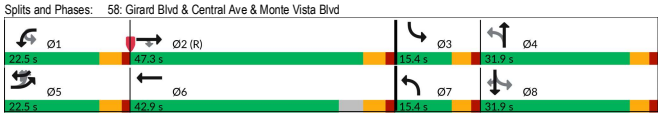
Intersection Summary
Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

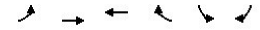
Intersection Signal Delay (s/veh): 54.3 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



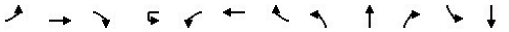
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 24.6% ICU Level of Service A
Analysis Period (min) 15



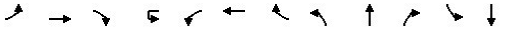
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	900	0	0	0
Future Volume (vph)	0	0	900	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	957	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	957	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.2%	ICU Level of Service A	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	



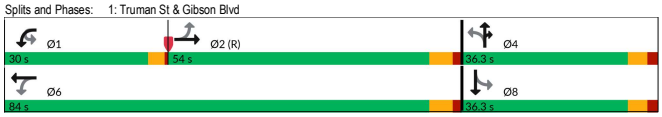
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

Intersection Summary	
Area Type:	Other
Cycle Length: 120.3	
Actuated Cycle Length: 120.3	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

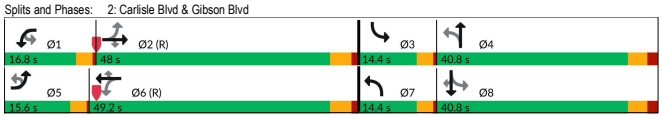
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary

Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



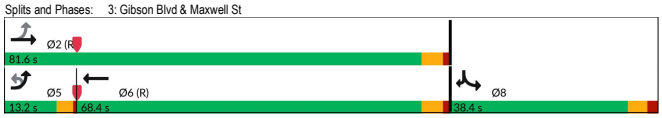
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay (s/veh): 3.3	Intersection LOS: A

Intersection Capacity Utilization 36.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

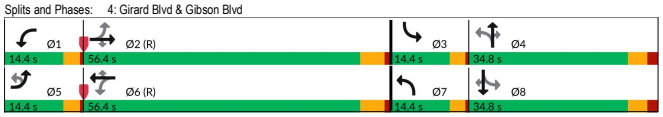
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123.3	
Actuated Cycle Length: 123.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	

Intersection Summary	

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

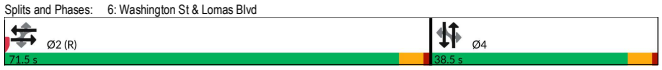
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



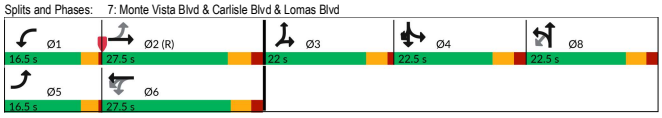
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	
Intersection Summary							

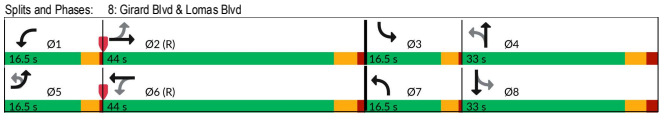
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

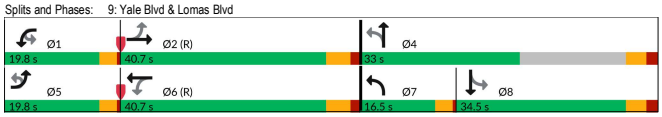
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09

Intersection Summary	

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



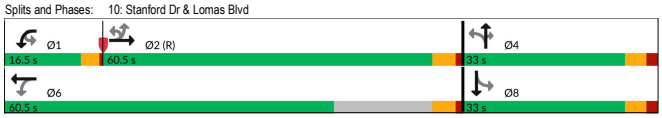
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	
Intersection Summary		

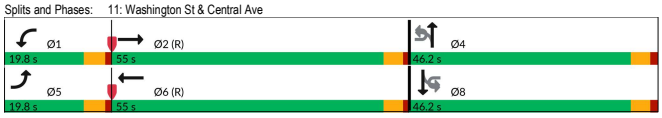
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	27	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	27	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.374			0.357
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	707	1851	0	669
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			699		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	28	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	28	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.9			15.9	75.5		18.2	18.2		18.2
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.36		0.27	0.71		0.22
Control Delay (s/veh)		77.1	15.1			79.8	15.1		49.8	60.0		48.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.1			79.8	15.1		49.8	60.0		48.2
LOS		E	B			E	B		D	E		D
Approach Delay (s/veh)			20.3				20.6			58.7		
Approach LOS			C				C			E		
Queue Length 50th (ft)		27	146			30	160		20	145		15
Queue Length 95th (ft)		61	281			66	309		47	214		40
Internal Link Dist (ft)			1288				848			619		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1165			78	1176		240	635		227
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.36		0.12	0.32		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 121			
Actuated Cycle Length: 121			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 33.0		Intersection LOS: C	
Intersection Capacity Utilization 59.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.2	
Actuated g/C Ratio	0.15	
v/c Ratio	0.69	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	57.4	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	207	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	440	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	440	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.998			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1896	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	700	1888	0	0	1347	1896	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	449	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	454	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

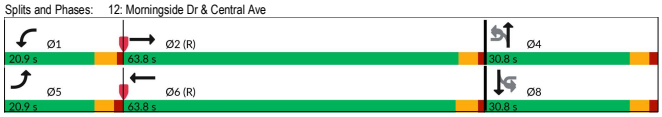
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.32			0.32		
Control Delay (s/veh)		57.5	5.8			49.1	9.0			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.5	5.8			49.1	9.0			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.3			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	128			22		
Queue Length 95th (ft)		52	191			32	254			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1418			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.32			0.11		

Intersection Summary

Area Type: Other
Cycle Length: 115.5
Actuated Cycle Length: 115.5
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 44.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	404	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	404	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.149				0.305			0.395			0.409
Satd. Flow (perm)	0	277	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	412	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	412	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.8	55.9	55.9		14.6	41.1	41.1	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.33	0.35	0.05		0.67	0.59	0.07	0.18	0.62		0.23
Control Delay (s/veh)		260.9	22.7	0.1		84.2	33.0	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		260.9	22.7	0.1		84.2	33.0	0.2	28.8	49.4		30.0
LOS		F	C	A		F	C	A	C	D		C
Approach Delay (s/veh)			66.3				35.0			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	241	0	22	122		31
Queue Length 95th (ft)		#203	278	0		#84	348	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		67	955	825		79	703	650	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.33	0.35	0.05		0.63	0.59	0.07	0.16	0.35		0.22

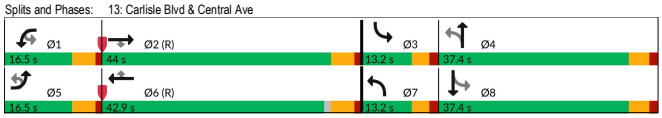
Intersection Summary
Area Type: Other
Cycle Length: 111.1
Actuated Cycle Length: 111.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay (s/veh): 48.3 Intersection LOS: D
Intersection Capacity Utilization 60.9% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	469	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	469	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.994			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1875	0	0	1749	0	0
Flt Permitted		0.656				0.588				0.912		
Satd. Flow (perm)	0	1218	1877	0	0	1022	1875	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				3			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	479	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	499	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.32			0.26		
Control Delay (s/veh)		53.4	3.8			49.5	6.0			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.4	3.8			49.5	6.0			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				7.9			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	56			16		
Queue Length 95th (ft)		41	96			39	244			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		166	1548			143	1557			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.32			0.09		

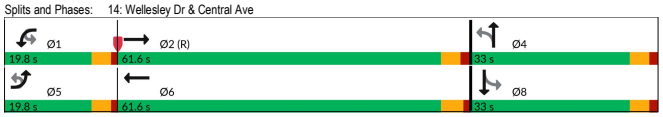
Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.34	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	408	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	408	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1876	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1177	1879	0	0	853	1876	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	416	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	423	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

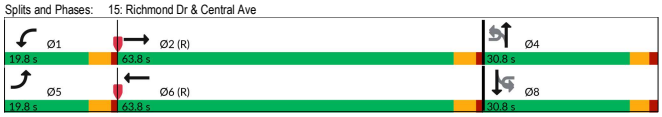
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.28			0.41		
Control Delay (s/veh)		49.0	7.8			64.4	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.0	7.8			64.4	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				7.0			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			19	35			23		
Queue Length 95th (ft)		36	253			52	71			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1501			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.28			0.14		

Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.7	Intersection LOS: B
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	573	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	573	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.995			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3580	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3580	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				4			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	585	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	605	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.29			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	14.9			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	14.9			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.8			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	114			16		
Queue Length 95th (ft)		#99	81			73	197			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2067			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.29			0.10		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

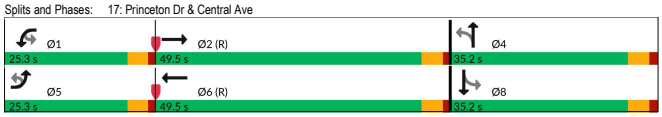
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	

Intersection Summary

Intersection Signal Delay (s/veh): 20.1 Intersection LOS: C
Intersection Capacity Utilization 47.5% ICU Level of Service A
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	571	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	571	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	583	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	588	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.21			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.6	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.6	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.7			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	32			10		5
Queue Length 95th (ft)		43	154			m68	43			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.21			0.08		0.02

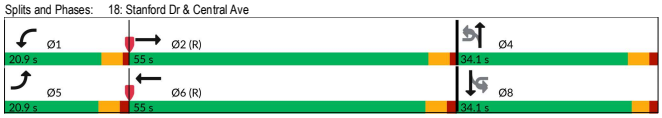
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	
Intersection Summary		

Intersection Signal Delay (s/veh): 10.0	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



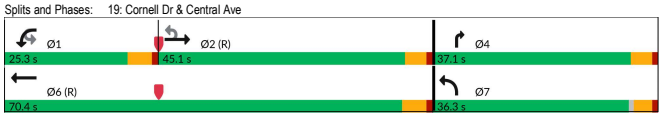
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	544	55	49
Future Volume (vph)	1	587	131	4	59	544	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	555	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	555	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.18	0.38	0.28
Control Delay (s/veh)		17.1			123.8	1.9	53.2	16.8
Queue Delay		0.0			0.0	0.3	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.2	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				14.8	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	27	37	0
Queue Length 95th (ft)		250			#113	47	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1865	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.45	0.10	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 107.5	
Actuated Cycle Length: 107.5	
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	

Intersection Signal Delay (s/veh): 17.5		Intersection LOS: B	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	96	13	84	498	9	118	23	87	12
Future Volume (vph)	4	11	582	96	13	84	498	9	118	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.98				1.00		0.99		0.97	0.99
Frt			0.979				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3468	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.076			0.405			0.742
Satd. Flow (perm)	0	1466	3468	0	0	144	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			15				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1232		
Travel Time (s)			32.1				17.0			33.6		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	98	13	86	508	9	120	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	692	0	0	99	517	0	120	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			52.3	101.5		21.7	16.8	16.8	11.3
Actuated g/C Ratio		0.06	0.36			0.37	0.73		0.16	0.12	0.12	0.08
v/c Ratio		0.16	0.54			1.87	0.20		0.55	0.10	0.29	0.09
Control Delay (s/veh)		55.1	39.0			474.9	8.6		60.8	54.3	4.6	47.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.1	39.0			474.9	8.6		60.8	54.3	4.6	47.3
LOS		E	D			F	A		E	D	A	D
Approach Delay (s/veh)			39.4				83.5			38.6		
Approach LOS			D				F			D		
Queue Length 50th (ft)		12	216			~142	70		95	17	0	9
Queue Length 95th (ft)		m17	m303			#231	148		153	47	16	27
Internal Link Dist (ft)			1332				670			1152		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1272			53	2603		248	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.54			1.87	0.20		0.48	0.05	0.18	0.07

Intersection Summary
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.87

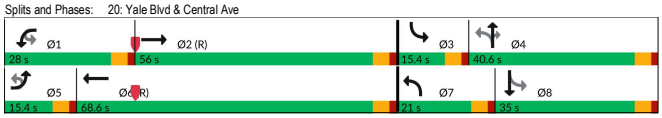
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.1	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	

Intersection Summary

Intersection Signal Delay (s/veh): 56.7 Intersection LOS: E
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Future Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.97	0.98			0.94	0.99	
Frt			0.993				0.946				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1885	0	0	1805	3358	0	0	1805	4971	0
Flt Permitted		0.116				0.108				0.503		
Satd. Flow (perm)	0	220	1885	0	0	200	3358	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				86				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	389	18	20	47	383	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	407	0	0	67	600	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	48.9			36.9	51.3			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.62			1.29	0.47			0.18	0.66	
Control Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.0				51.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	301			~80	205			23	104	
Queue Length 95th (ft)		#175	424			#190	126			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	660			52	1285			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.62			1.29	0.47			0.11	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29

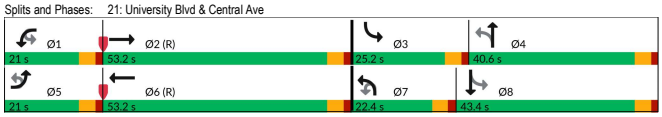
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 56.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Future Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.503				0.459			0.950			
Satd. Flow (perm)	0	956	1900	1563	0	872	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							712	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	388	171	11	70	432	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	388	171	0	81	432	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

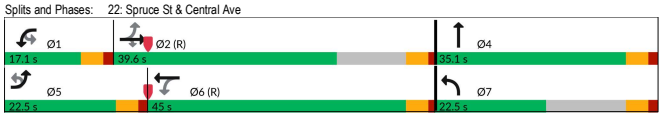
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.40		0.05	
Control Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			6.7				5.7			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	105	0		12	76		67		0	
Queue Length 95th (ft)		3	162	23		23	171		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		858	1251	1088		761	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.21		0.05	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 9.2	Intersection LOS: A
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	419	25	1	19	401	47	35	54	9	60
Future Volume (vph)	5	109	419	25	1	19	401	47	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300		120		0	120		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99	1.00		1.00	1.00		1.00
Frt				0.850			0.984			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3610	1615	0	1805	3542	0	1805	1856	0	1805
Flt Permitted		0.461				0.503			0.485			0.715
Satd. Flow (perm)	0	870	3610	1568	0	950	3542	0	920	1856	0	1358
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				76			16			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			351				320			291		
Travel Time (s)			8.0				7.3			6.6		
Confl. Peds. (#/hr)	3	3		3	3	3		3	3		3	1
Confl. Bikes (#/hr)				4				1			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	428	26	1	19	409	48	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	428	26	0	20	457	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1699	0
Flt Permitted		
Satd. Flow (perm)	1699	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	103	
Link Speed (mph)	30	
Link Distance (ft)	293	
Travel Time (s)	6.7	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	13.1%	39.4%		35.0%	35.0%		35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	7.7	29.3		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		3.5	4.5		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0			10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		65.8	61.6	61.6		62.6	56.9		10.3	10.3		10.3
Actuated g/C Ratio		0.77	0.72	0.72		0.73	0.66		0.12	0.12		0.12
v/c Ratio		0.16	0.17	0.02		0.03	0.19		0.33	0.28		0.37
Control Delay (s/veh)		3.2	5.1	0.0		3.1	6.5		41.5	32.4		40.4
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.2	5.1	0.0		3.1	6.5		41.5	32.4		40.4
LOS		A	A	A		A	A		D	C		D
Approach Delay (s/veh)			4.5				6.4			35.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		11	23	0		2	43		18	28		31
Queue Length 95th (ft)		29	73	0		8	82		45	60		65
Internal Link Dist (ft)			271				240			211		
Turn Bay Length (ft)		300		300		120			120			100
Base Capacity (vph)		875	2593	1147		786	2355		262	536		387
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.13	0.17	0.02		0.03	0.19		0.14	0.12		0.16

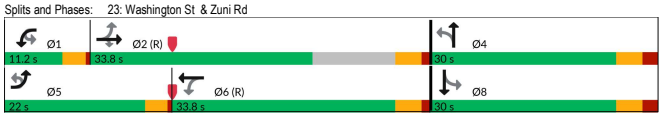
Intersection Summary
Area Type: Other
Cycle Length: 85.8
Actuated Cycle Length: 85.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	35.0%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.59	
Control Delay (s/veh)	23.9	
Queue Delay	0.0	
Total Delay (s/veh)	23.9	
LOS	C	
Approach Delay (s/veh)	28.2	
Approach LOS	C	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	213	
Turn Bay Length (ft)		
Base Capacity (vph)	558	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

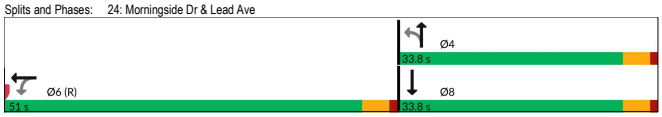


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	538	12	13	15	0	0	15	34
Future Volume (vph)	0	0	0	8	538	12	13	15	0	0	15	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.997						0.905	
Flt Protected					0.999			0.977				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1856	0	0	1695	0
Flt Permitted					0.999			0.915				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1738	0	0	1695	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	549	12	13	15	0	0	15	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	569	0	0	28	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.29			0.05			0.08	
Control Delay (s/veh)					10.7			18.9			9.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.7			18.9			9.6	
LOS					B			B			A	
Approach Delay (s/veh)					10.7			18.9			9.6	
Approach LOS					B			B			A	
Queue Length 50th (ft)					78			10			5	
Queue Length 95th (ft)					110			28			28	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1972			600			608	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B	
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



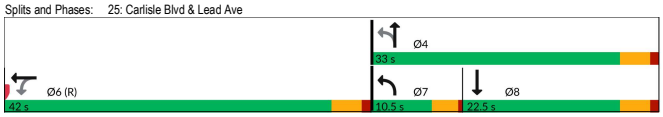
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	51	522	40	65	173	0	0	150	55
Future Volume (vph)	0	0	0	51	522	40	65	173	0	0	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											1.00	
Frt					0.990						0.964	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	3560	0	1805	1900	0	0	1824	0
Flt Permitted					0.996		0.340					
Satd. Flow (perm)	0	0	0	0	3560	0	646	1900	0	0	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	52	533	41	66	177	0	0	153	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	626	0	66	177	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.8		21.2	20.2			12.3	
Actuated g/C Ratio					0.61		0.28	0.27			0.16	
v/c Ratio					0.29		0.24	0.35			0.66	
Control Delay (s/veh)					8.4		10.6	16.8			35.7	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					8.4		10.6	16.8			35.7	
LOS					A		B	B			D	
Approach Delay (s/veh)					8.4			15.1			35.7	
Approach LOS					A			B			D	
Queue Length 50th (ft)					67		9	31			82	
Queue Length 95th (ft)					116		17	42			138	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2178		290	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.29		0.23	0.25			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			

Intersection Signal Delay (s/veh): 15.2	Intersection LOS: B
Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



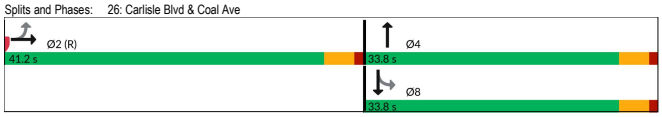
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	530	74	0	0	0	0	192	46	25	176	0
Future Volume (vph)	44	530	74	0	0	0	0	192	46	25	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.983						0.974				
Flt Protected		0.997								0.950		
Satd. Flow (prot)	0	3528	0	0	0	0	0	1846	0	1805	1900	0
Flt Permitted		0.997								0.383		
Satd. Flow (perm)	0	3528	0	0	0	0	0	1846	0	728	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26						19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	45	541	76	0	0	0	0	196	47	26	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	243	0	26	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.3						13.7		13.7	13.7	
Actuated g/C Ratio		0.70						0.18		0.18	0.18	
v/c Ratio		0.27						0.69		0.20	0.52	
Control Delay (s/veh)		4.9						36.0		41.2	45.2	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		4.9						36.0		41.2	45.2	
LOS		A						D		D	D	
Approach Delay (s/veh)		4.9						36.0			44.7	
Approach LOS		A						D			D	
Queue Length 50th (ft)		47						98		12	89	
Queue Length 95th (ft)		90						155		m30	151	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2467						732		284	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.27						0.33		0.09	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	

Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	583	8	0	0	0	0	17	8	5	15	0
Future Volume (vph)	13	583	8	0	0	0	0	17	8	5	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.957				
Flt Protected		0.999									0.988	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1818	0	0	1877	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	3599	0	0	0	0	0	1818	0	0	1877	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			678			657			532	
Travel Time (s)		31.0			15.4			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	595	8	0	0	0	0	17	8	5	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	25	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.6%		ICU Level of Service A	
Analysis Period (min) 15			

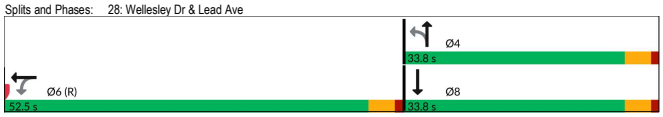
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	630	16	16	9	0	0	10	27
Future Volume (vph)	0	0	0	8	630	16	16	9	0	0	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.996						0.901	
Flt Protected					0.999			0.969				
Satd. Flow (prot)	0	0	0	0	3590	0	0	1841	0	0	1712	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	3590	0	0	1680	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	643	16	16	9	0	0	10	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	667	0	0	25	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.33			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					10.9			19.5			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.9			19.5			9.9	
LOS					B			B			A	
Approach Delay (s/veh)					10.9			19.5			9.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					96			9			4	
Queue Length 95th (ft)					130			26			24	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1998			570			599	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.33			0.04			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.33
Intersection Signal Delay (s/veh): 11.2 Intersection LOS: B
Intersection Capacity Utilization 39.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: Wellesley Dr & Lead Ave



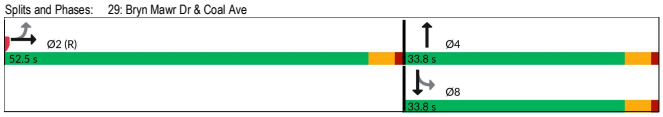
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	652	3	0	0	0	0	1	6	3	5	0
Future Volume (vph)	15	652	3	0	0	0	0	1	6	3	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.884				
Flt Protected		0.999									0.982	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1646	0	0	1866	0
Flt Permitted		0.999									0.961	
Satd. Flow (perm)	0	3601	0	0	0	0	0	1646	0	0	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	665	3	0	0	0	0	1	6	3	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.34						0.01			0.01	
Control Delay (s/veh)		11.1						12.4			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		11.1						12.4			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		11.1						12.4			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		99						0			3	
Queue Length 95th (ft)		134						9			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2003						562			619	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.34						0.01			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.34
Intersection Signal Delay (s/veh): 11.2 Intersection LOS: B
Intersection Capacity Utilization 43.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



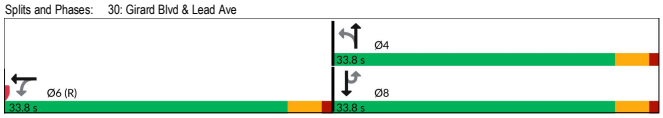
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	672	30	42	190	0	1	0	155
Future Volume (vph)	0	0	0	40	672	30	42	190	0	1	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt					0.994							0.952
Flt Protected					0.997			0.991				
Satd. Flow (prot)	0	0	0	0	3574	0	0	1883	0	0	0	1799
Flt Permitted					0.997			0.833				0.999
Satd. Flow (perm)	0	0	0	0	3574	0	0	1582	0	0	0	1797
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					8							52
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		25.8			33.6			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	686	31	43	194	0	1	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	758	0	0	237	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2		1	2		1		2
Detector Template				Left	Thru		Left	Thru		Left		Thru
Leading Detector (ft)				20	100		20	100		20		100
Trailing Detector (ft)				0	0		0	0		0		0
Detector 1 Position(ft)				0	0		0	0		0		0
Detector 1 Size(ft)				20	6		20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	88
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases				6			4			8		
Detector Phase				6	6		4	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0		8.0		8.0
Minimum Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (%)				50.0%	50.0%		50.0%	50.0%		50.0%		50.0%
Maximum Green (s)				29.3	29.3		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode				C-Max	C-Max		None	None		None		None
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					44.8			13.8				13.8
Actuated g/C Ratio					0.66			0.20				0.20
v/c Ratio					0.32			0.73				0.61
Control Delay (s/veh)					5.9			38.1				24.7
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					5.9			38.1				24.7
LOS					A			D				C
Approach Delay (s/veh)					5.9			38.1				24.7
Approach LOS					A			D				C
Queue Length 50th (ft)					58			93				73
Queue Length 95th (ft)					111			146				124
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)					2370			685				808
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.32			0.35				0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave



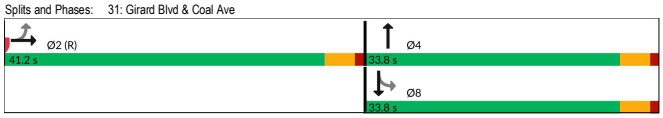
Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	596	49	0	0	0	0	156	30	39	160	0
Future Volume (vph)	78	596	49	0	0	0	0	156	30	39	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.990						0.978				
Flt Protected		0.995									0.990	
Satd. Flow (prot)	0	3550	0	0	0	0	0	1854	0	0	1881	0
Flt Permitted		0.995									0.823	
Satd. Flow (perm)	0	3548	0	0	0	0	0	1854	0	0	1563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	80	608	50	0	0	0	0	159	31	40	163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	738	0	0	0	0	0	190	0	0	203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.7						13.3			13.3	
Actuated g/C Ratio		0.70						0.18			0.18	
v/c Ratio		0.30						0.56			0.73	
Control Delay (s/veh)		15.8						31.4			44.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		15.8						31.4			44.2	
LOS		B						C			D	
Approach Delay (s/veh)		15.8						31.4			44.2	
Approach LOS		B						C			D	
Queue Length 50th (ft)		147						75			90	
Queue Length 95th (ft)		222						124			145	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2497						733			610	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.30						0.26			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 23.5		Intersection LOS: C	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



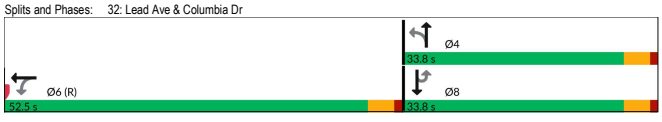
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	773	26	9	24	0	1	0	9
Future Volume (vph)	0	0	0	23	773	26	9	24	0	1	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00				0.99
Frt					0.995							0.909
Flt Protected					0.999			0.987				0.998
Satd. Flow (prot)	0	0	0	0	3588	0	0	1875	0	0	0	1707
Flt Permitted					0.999			0.955				0.997
Satd. Flow (perm)	0	0	0	0	3588	0	0	1813	0	0	0	1705
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					6							21
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		27.2			25.8			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	23	789	27	9	24	0	1	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	839	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8
Permitted Phases				6			4			8		
Minimum Split (s)				41.2	41.2		33.8	33.8		33.8		33.8
Total Split (s)				52.5	52.5		33.8	33.8		33.8		33.8
Total Split (%)				60.8%	60.8%		39.2%	39.2%		39.2%		39.2%
Maximum Green (s)				48.0	48.0		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					48.0			29.3				29.3
Actuated g/C Ratio					0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	21
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio					0.42			0.05				0.05
Control Delay (s/veh)					11.8			19.6				11.0
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					11.8			19.6				11.0
LOS					B			B				B
Approach Delay (s/veh)					11.8			19.6				11.0
Approach LOS					B			B				B
Queue Length 50th (ft)					128			12				4
Queue Length 95th (ft)					170			32				22
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)					1998			615				592
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.42			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 12.1		Intersection LOS: B	
Intersection Capacity Utilization 47.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Lead Ave & Columbia Dr



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

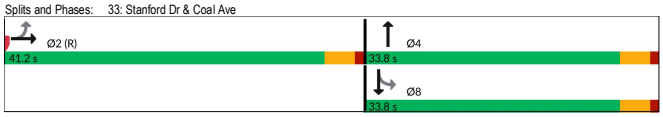
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	710	6	0	0	0	0	4	1	11	5	0
Future Volume (vph)	18	710	6	0	0	0	0	4	1	11	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.999						0.973				
Flt Protected		0.999									0.967	
Satd. Flow (prot)	0	3531	0	0	0	0	0	1805	0	0	1801	0
Flt Permitted		0.999									0.908	
Satd. Flow (perm)	0	3531	0	0	0	0	0	1805	0	0	1685	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	18	724	6	0	0	0	0	4	1	11	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	748	0	0	0	0	0	5	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	
v/c Ratio		0.43						0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		13.4						13.2			14.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		13.4						13.2			14.3	
LOS		B						B			B	
Approach Delay (s/veh)		13.4						13.2			14.3	
Approach LOS		B						B			B	
Queue Length 50th (ft)		111						1			4	
Queue Length 95th (ft)		154						7			16	
Internal Link Dist (ft)		675					1419	266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1728						705			658	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.43						0.01			0.02	

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	189	604	27	76	213	0	0	142	55
Future Volume (vph)	0	0	0	189	604	27	76	213	0	0	142	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.993							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3576	0	1805	1900	0	0	1900	1615
Flt Permitted				0.950			0.625					
Satd. Flow (perm)	0	0	0	1745	3576	0	1184	1900	0	0	1900	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8							87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	7		7	16		16	3		3			
Confl. Bikes (#/hr)			3			2						1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	193	616	28	78	217	0	0	145	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	193	644	0	78	217	0	0	145	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

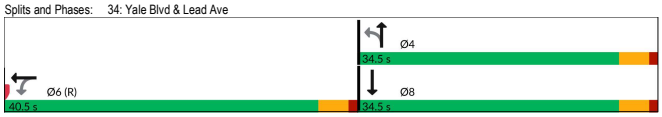
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				51.9	51.9		14.1	14.1			14.1	75.0
Actuated g/C Ratio				0.69	0.69		0.19	0.19			0.19	1.00
v/c Ratio				0.16	0.26		0.35	0.61			0.41	0.04
Control Delay (s/veh)				5.2	5.1		29.4	34.6			29.1	0.0
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				5.2	5.1		29.4	34.6			29.1	0.0
LOS				A	A		C	C			C	A
Approach Delay (s/veh)					5.1			33.2			21.0	
Approach LOS					A			C			C	
Queue Length 50th (ft)				26	47		32	94			60	0
Queue Length 95th (ft)				62	91		63	144			100	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1207	2476		473	760			760	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.16	0.26		0.16	0.29			0.19	0.04

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			

Intersection Signal Delay (s/veh): 13.7	Intersection LOS: B
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: Yale Blvd & Lead Ave



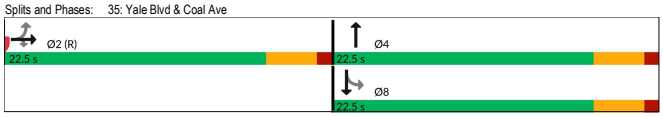
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	547	53	0	0	0	0	274	155	35	296	0
Future Volume (vph)	42	547	53	0	0	0	0	274	155	35	296	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97					0.99		1.00		
Frt			0.850					0.951				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1795	0	1805	1900	0
Flt Permitted	0.950									0.310		
Satd. Flow (perm)	1805	3610	1574	0	0	0	0	1795	0	587	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			54					75				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	558	54	0	0	0	0	280	158	36	302	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	558	54	0	0	0	0	438	0	36	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	22.0	22.0	22.0					14.0		14.0	14.0	
Actuated g/C Ratio	0.49	0.49	0.49					0.31		0.31	0.31	
v/c Ratio	0.05	0.32	0.07					0.72		0.20	0.51	
Control Delay (s/veh)	7.9	8.5	3.5					17.8		12.5	15.1	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	7.9	8.5	3.5					17.8		12.5	15.1	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		8.1						17.8			14.8	
Approach LOS		A						B			B	
Queue Length 50th (ft)	5	42	0					77		7	61	
Queue Length 95th (ft)	20	81	14					134		20	100	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	881	1763	796					763		234	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.05	0.32	0.07					0.57		0.15	0.40	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay (s/veh): 12.6	Intersection LOS: B
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave



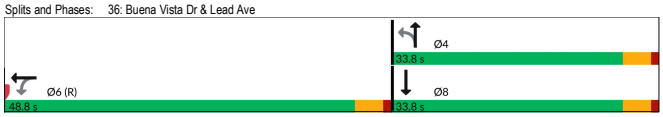
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Future Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.928	
Flt Protected					0.999			0.960				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1824	0	0	1748	0
Flt Permitted					0.999			0.801				
Satd. Flow (perm)	0	0	0	0	3596	0	0	1518	0	0	1748	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	19	759	11	58	11	0	0	7	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	789	0	0	69	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.41			0.13			0.02	
Control Delay (s/veh)					12.1			18.9			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.1			18.9			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					12.1			18.9			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					118			24			2	
Queue Length 95th (ft)					160			52			14	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1929			538			625	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.41			0.13			0.02	

Intersection Summary

Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 46.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave



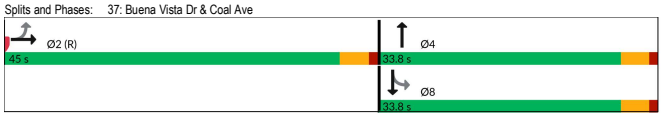
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Future Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.99			1.00	
Frt		0.990						0.942				
Flt Protected		0.998									0.987	
Satd. Flow (prot)	0	3554	0	0	0	0	0	1773	0	0	1875	0
Flt Permitted		0.998									0.897	
Satd. Flow (perm)	0	3548	0	0	0	0	0	1773	0	0	1698	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14						31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	632	48	0	0	0	0	41	31	8	23	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	710	0	0	0	0	0	72	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		20	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		20	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.9						8.3			8.3	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.24						0.34			0.17	
Control Delay (s/veh)		2.3						25.7			34.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.3						25.7			34.3	
LOS		A						C			C	
Approach Delay (s/veh)		2.3						25.7			34.3	
Approach LOS		A						C			C	
Queue Length 50th (ft)		34						19			14	
Queue Length 95th (ft)		54						56			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2923						678			631	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.24						0.11			0.05	

Intersection Summary

Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 5.6		Intersection LOS: A	
Intersection Capacity Utilization 40.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Future Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0		0	
Storage Lanes	0		0	0		1	1		0		0	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	0.91	1.00	0.91
Ped Bike Factor					1.00	0.98	1.00					1.00
Frt						0.850						0.979
Flt Protected					0.994		0.950					
Satd. Flow (prot)	0	0	0	0	3588	1615	1805	5187	0	0	0	5066
Flt Permitted					0.994		0.440					0.939
Satd. Flow (perm)	0	0	0	0	3586	1586	834	5187	0	0	0	4757
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)						99						38
Link Speed (mph)		30			30			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		48.6			22.7			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	85	647	99	60	284	0	2	0	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	732	99	60	284	0	0	0	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2	1	1	2		1		2
Detector Template				Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)				20	100	20	20	100		20		100
Trailing Detector (ft)				0	0	0	0	0		0		0
Detector 1 Position(ft)				0	0	0	0	0		0		0
Detector 1 Size(ft)				20	6	20	20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

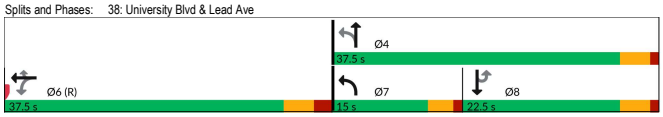
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA	Perm	pm+pt	NA		Perm		NA
Protected Phases					6		7	4				8
Permitted Phases				6		6	4			8		
Detector Phase				6	6	6	7	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0		8.0		8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%		30.0%		30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0		18.0		18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5		3.5		3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				0.0
Total Lost Time (s)					5.5	5.5	4.0	4.5				4.5
Lead/Lag							Lead			Lag		Lag
Lead-Lag Optimize?							Yes			Yes		Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0		3.0		3.0
Recall Mode				C-Max	C-Max	C-Max	None	Max		Max		Max
Walk Time (s)				7.0	7.0	7.0		7.0		7.0		7.0
Flash Don't Walk (s)				23.0	23.0	23.0		10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0	0		0		0		0
Act Effct Green (s)					32.0	32.0	33.5	33.0				26.9
Actuated g/C Ratio					0.43	0.43	0.45	0.44				0.36
v/c Ratio					0.48	0.14	0.14	0.12				0.23
Control Delay (s/veh)					16.8	3.6	12.7	12.6				16.8
Queue Delay					0.0	0.0	0.0	0.0				0.0
Total Delay (s/veh)					16.8	3.6	12.7	12.6				16.8
LOS					B	A	B	B				B
Approach Delay (s/veh)					15.2			12.7				16.8
Approach LOS					B			B				B
Queue Length 50th (ft)					124	0	15	27				46
Queue Length 95th (ft)					171	25	35	42				71
Internal Link Dist (ft)		2058			918			690				1038
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1530	733	514	2282				1729
Starvation Cap Reductn					0	0	0	0				0
Spillback Cap Reductn					0	0	0	0				0
Storage Cap Reductn					0	0	0	0				0
Reduced v/c Ratio					0.48	0.14	0.12	0.12				0.23

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 15.1	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



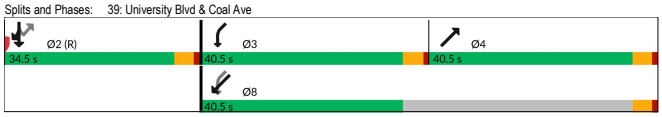
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Future Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				0.99					0.97			
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.497		
Satd. Flow (perm)	0	0	0	1794	3610	1615	0	5187	1562	944	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						74			106			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.06	0.53	0.17		0.18	0.07	0.11	0.09	
Control Delay (s/veh)				32.7	39.2	9.5		29.4	0.1	7.3	7.1	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.7	39.2	9.5		29.4	0.1	7.3	7.1	
LOS				C	D	A		C	A	A	A	
Approach Delay (s/veh)					35.0			21.5			7.1	
Approach LOS					D			C			A	
Queue Length 50th (ft)				15	167	3		57	0	23	28	
Queue Length 95th (ft)				38	223	41		81	0	42	40	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				465	937	474		1616	1562	893	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.06	0.53	0.17		0.18	0.07	0.11	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Intersection Signal Delay (s/veh): 23.0	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

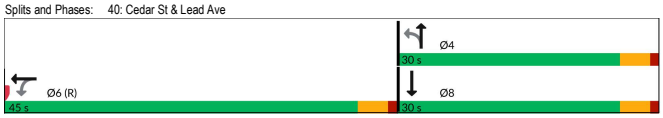


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Future Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.996						0.888	
Flt Protected					0.998			0.986				
Satd. Flow (prot)	0	0	0	0	3586	0	0	1873	0	0	1687	0
Flt Permitted					0.998			0.866				
Satd. Flow (perm)	0	0	0	0	3586	0	0	1645	0	0	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						83	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	30	786	20	16	39	0	0	17	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	836	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					61.1			8.3			8.3	
Actuated g/C Ratio					0.81			0.11			0.11	
v/c Ratio					0.29			0.30			0.38	
Control Delay (s/veh)					2.3			35.3			15.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					2.3			35.3			15.0	
LOS					A			D			B	
Approach Delay (s/veh)					2.3			35.3			15.0	
Approach LOS					A			D			B	
Queue Length 50th (ft)					36			24			7	
Queue Length 95th (ft)					70			56			49	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2922			559			628	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.10			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

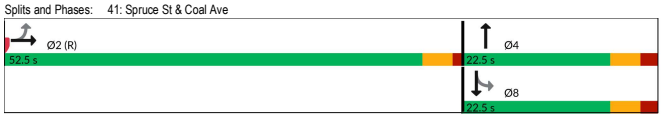


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Future Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.998						0.932				
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1748	0	0	1858	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	3597	0	0	0	0	0	1748	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	608	7	0	0	0	0	7	7	8	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	631	0	0	0	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.18						0.07			0.09	
Control Delay (s/veh)		0.9						24.0			31.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						24.0			31.4	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						24.0			31.4	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						3			8	
Queue Length 95th (ft)		46						19			26	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3424						401			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.18						0.03			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



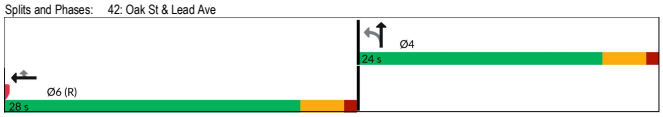
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Future Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						196	72					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					31.1	31.1	11.9	11.9				
Actuated g/C Ratio					0.60	0.60	0.23	0.23				
v/c Ratio					0.14	0.45	0.15	0.59				
Control Delay (s/veh)					5.3	5.5	5.2	20.4				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					5.3	5.5	5.2	20.4				
LOS					A	A	A	C				
Approach Delay (s/veh)					5.4			18.5				
Approach LOS					A			B				
Queue Length 50th (ft)					16	32	0	71				
Queue Length 95th (ft)					35	101	21	96				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					3098	1026	721	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.14	0.45	0.10	0.36				

Intersection Summary
Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 10.5 Intersection LOS: B
Intersection Capacity Utilization 49.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Future Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.968				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	5007	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	5007	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	321							63				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	321	673	0	0	0	0	0	236	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	673	0	0	0	0	0	299	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.28	0.34						0.26				
Control Delay (s/veh)	1.5	6.0						12.0				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	1.5	6.0						12.0				
LOS	A	A						B				
Approach Delay (s/veh)		4.6						12.0				
Approach LOS		A						B				
Queue Length 50th (ft)	0	42						18				
Queue Length 95th (ft)	23	66						35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	1145	2005						1930				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.28	0.34						0.15				

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.34

Intersection Signal Delay (s/veh): 6.3	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

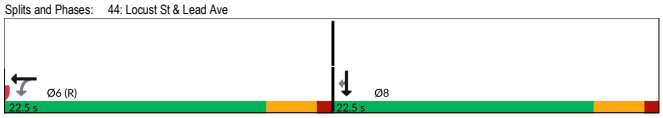
Splits and Phases: 43: Oak St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Future Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.968	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3347	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3347	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				92							86	220
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	92	463	0	0	0	0	0	393	328
Shared Lane Traffic (%)												33%
Lane Group Flow (vph)	0	0	0	92	463	0	0	0	0	0	501	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.7	22.7						13.3	13.3
Actuated g/C Ratio				0.50	0.50						0.30	0.30
v/c Ratio				0.10	0.25						0.48	0.37
Control Delay (s/veh)				2.8	7.7						11.6	3.9
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.8	7.7						11.6	3.9
LOS				A	A						B	A
Approach Delay (s/veh)					6.9						9.2	
Approach LOS					A						A	
Queue Length 50th (ft)				0	30						47	0
Queue Length 95th (ft)				18	67						65	31
Internal Link Dist (ft)		1009			258		86				4	
Turn Bay Length (ft)												
Base Capacity (vph)				954	1817						1390	720
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.10	0.25						0.36	0.31

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay (s/veh): 8.2	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave

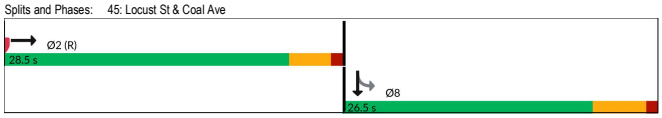


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Future Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00										
Frt		0.985										
Flt Protected										0.950	0.967	
Satd. Flow (prot)	0	5102	0	0	0	0	0	0	0	1643	3344	0
Flt Permitted										0.950	0.967	
Satd. Flow (perm)	0	5102	0	0	0	0	0	0	0	1643	3344	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		44								180	180	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	595	67	0	0	0	0	0	0	400	91	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	200	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										8		
Detector Phase		2								8	8	
Switch Phase												
Minimum Initial (s)		10.0								10.0	10.0	
Minimum Split (s)		28.5								26.5	26.5	
Total Split (s)		28.5								26.5	26.5	
Total Split (%)		51.8%								48.2%	48.2%	
Maximum Green (s)		24.0								21.0	21.0	
Yellow Time (s)		3.5								4.5	4.5	
All-Red Time (s)		1.0								1.0	1.0	
Lost Time Adjust (s)		0.0								0.0	0.0	
Total Lost Time (s)		4.5								5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0								2.0	2.0	
Recall Mode		C-Max								None	None	
Walk Time (s)		7.0								7.0	7.0	
Flash Don't Walk (s)		13.0								10.0	10.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		34.5								10.5	10.5	
Actuated g/C Ratio		0.63								0.19	0.19	
v/c Ratio		0.21								0.44	0.37	
Control Delay (s/veh)		4.4								8.0	9.4	
Queue Delay		0.0								0.0	0.0	
Total Delay (s/veh)		4.4								8.0	9.4	
LOS		A								A	A	
Approach Delay (s/veh)		4.4									8.8	
Approach LOS		A									A	
Queue Length 50th (ft)		25								6	17	
Queue Length 95th (ft)		43								52	43	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)												
Base Capacity (vph)		3218								738	1388	
Starvation Cap Reductn		0								0	0	
Spillback Cap Reductn		0								0	0	
Storage Cap Reductn		0								0	0	
Reduced v/c Ratio		0.21								0.27	0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave

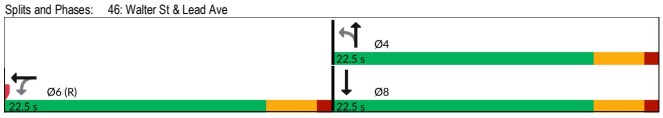


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Future Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.994						0.932	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	3580	0	0	1866	0	0	1757	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3580	0	0	1900	0	0	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12						5	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	650	30	4	7	0	0	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	696	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.21			0.03			0.03	
Control Delay (s/veh)					1.0			22.8			12.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.0			22.8			12.8	
LOS					A			C			B	
Approach Delay (s/veh)					1.0			22.8			12.8	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			3			1	
Queue Length 95th (ft)					42			15			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3310			760			705	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.21			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay (s/veh): 1.5		Intersection LOS: A	
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Walter St & Lead Ave

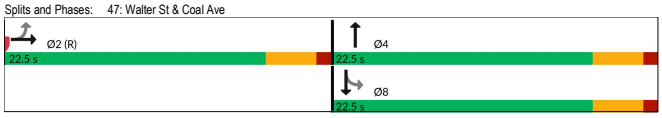


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Future Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.900				
Flt Protected											0.983	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1693	0	0	1868	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1693	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						23				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	608	3	0	0	0	0	8	23	7	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.18						0.10			0.06	
Control Delay (s/veh)		1.4						10.1			17.5	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						10.1			17.5	
LOS		A						B			B	
Approach Delay (s/veh)		1.4						10.1			17.5	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			5	
Queue Length 95th (ft)		47						18			20	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						691			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.18						0.04			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 34.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Future Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						0.99		1.00				
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1754	3574	0	0	3574
Flt Permitted				0.950				0.482				
Satd. Flow (perm)	0	0	0	1805	3610	1593	0	887	3574	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						94						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	0	0	0	77	463	96	2	67	371	0	0	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	77	463	96	0	69	371	0	0	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			1
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			10
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			10
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1589
Right Turn on Red	Yes
Satd. Flow (RTOR)	79
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	79
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	10
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	10
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

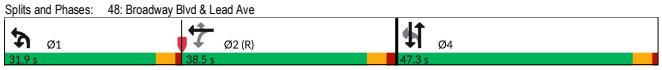
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	24.2	24.2	47.3			47.3
Total Split (s)				38.5	38.5	38.5	31.9	31.9	47.3			47.3
Total Split (%)				32.7%	32.7%	32.7%	27.1%	27.1%	40.2%			40.2%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	42.8			42.8
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		46.9	42.8			42.8
Actuated g/C Ratio				0.50	0.50	0.50		0.40	0.36			0.36
v/c Ratio				0.09	0.26	0.11		0.18	0.29			0.28
Control Delay (s/veh)				16.8	18.0	3.8		21.9	27.4			27.2
Queue Delay				0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)				16.8	18.0	3.8		21.9	27.4			27.2
LOS				B	B	A		C	C			C
Approach Delay (s/veh)					15.7				26.5			23.4
Approach LOS					B				C			C
Queue Length 50th (ft)				31	106	1		30	104			101
Queue Length 95th (ft)				59	143	29		59	143			140
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				896	1793	838		730	1299			1299
Starvation Cap Reductn				0	0	0		0	0			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.09	0.26	0.11		0.09	0.29			0.28

Intersection Summary	
Area Type:	Other
Cycle Length: 117.7	
Actuated Cycle Length: 117.7	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	42.8
Actuated g/C Ratio	0.36
v/c Ratio	0.13
Control Delay (s/veh)	6.0
Queue Delay	0.0
Total Delay (s/veh)	6.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	32
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	628
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.13
Intersection Summary	

Intersection Signal Delay (s/veh): 21.1	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Future Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.99		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3574	1615	0	1805	3610
Flt Permitted	0.950										0.459	
Satd. Flow (perm)	1798	3610	1589	0	0	0	0	3574	1594	0	871	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			66						69			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		10.8			25.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	36	489	66	0	0	0	0	394	52	4	64	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	66	0	0	0	0	394	52	0	68	362
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9		61.4	37.9
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34		0.56	0.34
v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29
Control Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
LOS	C	C	A					C	A		B	C
Approach Delay (s/veh)		28.8						24.7				24.4
Approach LOS		C						C				C
Queue Length 50th (ft)	18	144	0					106	0		19	97
Queue Length 95th (ft)	42	194	31					147	18		37	136
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	557	1119	538					1231	594		681	1243
Starvation Cap Reductn	0	0	0					0	0		0	0
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 26.3		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	13	361
Future Volume (vph)	42	26	420	18	1	13	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.998
Satd. Flow (prot)	1713	0	1853	0	0	0	1859
Flt Permitted	0.970						0.998
Satd. Flow (perm)	1713	0	1853	0	0	0	1859
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	13	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	382
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	10	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	10	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.961			0.970			0.997			0.987	
Flt Protected		0.981			0.989			0.997			0.999	
Satd. Flow (prot)	0	1756	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.981			0.989			0.997			0.999	
Satd. Flow (perm)	0	1756	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	10	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	9	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	9	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.957			0.899			0.999			0.994	
Flt Protected		0.990			0.988		0.950			0.950		
Satd. Flow (prot)	0	1800	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.990			0.988		0.950			0.950		
Satd. Flow (perm)	0	1800	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	9	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.9%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	9	5	7	6	1
Future Volume (vph)	4	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.907				0.981	
Flt Protected	0.985			0.980		
Satd. Flow (prot)	1697	0	0	1862	1864	0
Flt Permitted	0.985			0.980		
Satd. Flow (perm)	1697	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.8%	ICU Level of Service A	
Analysis Period (min)	15		

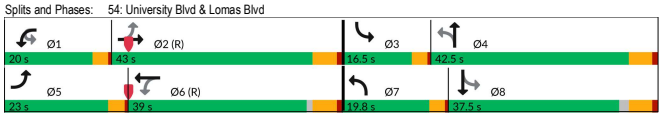
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99		0.98	1.00	1.00
Frt		0.981				0.968				0.850		0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11		11	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2			1	6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 122			
Actuated Cycle Length: 122			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

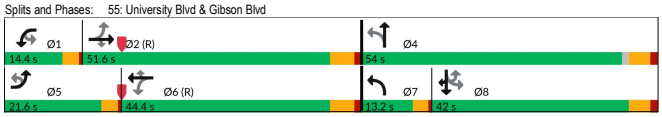
Intersection Summary
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9 Intersection LOS: C
Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	409	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	409	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.993				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3580	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3580	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	417	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	437	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.34			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	28.2			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	28.2			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				30.8				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	126			30	161	
Queue Length 95th (ft)		#354	350	13		60	169			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1299			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.34			0.17	0.57	

Intersection Summary

Area Type: Other
Cycle Length: 118.2
Actuated Cycle Length: 118.2
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.52

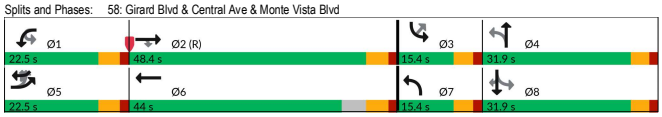
Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 94.1	Intersection LOS: F
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	867	0	0	0
Future Volume (vph)	0	0	867	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	885	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	885	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 147	
Actuated Cycle Length: 147	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	

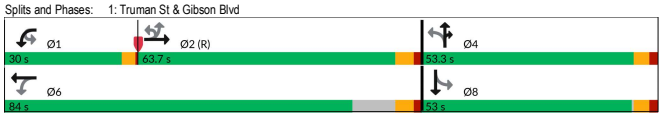
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary	

Intersection Signal Delay (s/veh): 30.5	Intersection LOS: C
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

Intersection Summary

Area Type: Other
Cycle Length: 133.8
Actuated Cycle Length: 133.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

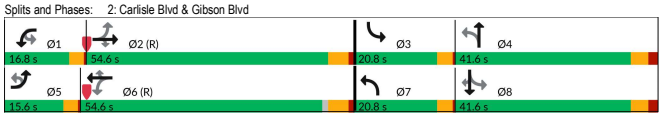
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

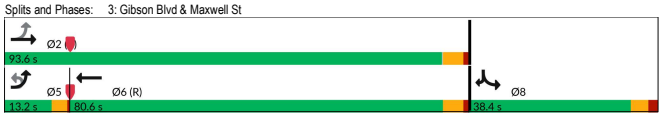
Intersection Summary

Area Type:	Other

Cycle Length: 132.2
Actuated Cycle Length: 132.2
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48

Intersection Signal Delay (s/veh): 4.1	Intersection LOS: A
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

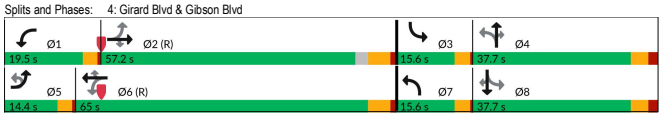
Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor				0.99				0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

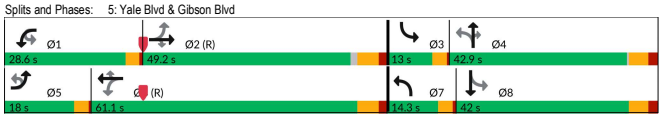
Intersection Summary			
Area Type:	Other		
Cycle Length: 135.4			
Actuated Cycle Length: 135.4			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 21.0		Intersection LOS: C	

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization 76.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

Intersection Summary

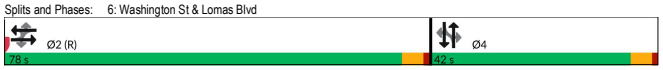
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

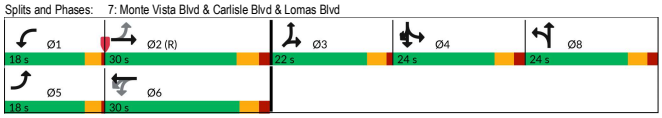
Intersection Summary			
Area Type:	Other		
Cycle Length: 118			
Actuated Cycle Length: 118			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 84.6		Intersection LOS: F	
Intersection Capacity Utilization 100.1%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



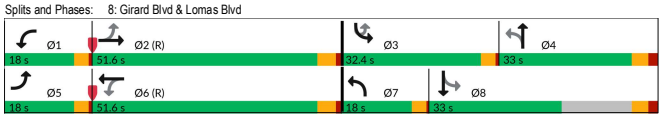
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 30.3 Intersection LOS: C
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

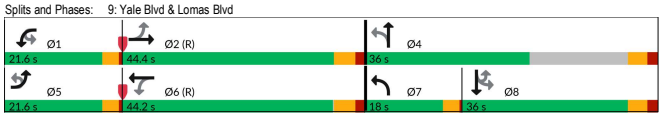
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13
Intersection Summary			

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



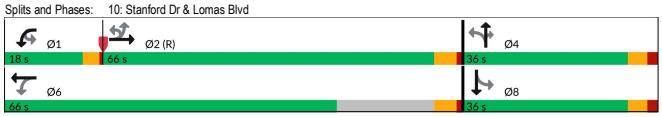
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)		7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)		17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)		0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

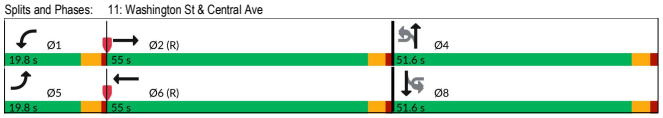
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	15	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	15	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.242				0.182			0.245			0.320
Satd. Flow (perm)	0	446	1881	0	0	346	1883	0	463	1869	0	603
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			699		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	16	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	16	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		18.1	64.7			22.0	71.2		25.2	25.2		25.2
Actuated g/C Ratio		0.14	0.51			0.17	0.56		0.20	0.20		0.20
v/c Ratio		0.68	0.42			0.90	0.41		0.17	0.68		0.08
Control Delay (s/veh)		95.8	23.2			142.7	20.9		43.5	54.8		39.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	23.2			142.7	20.9		43.5	54.8		39.0
LOS		F	C			F	C		D	D		D
Approach Delay (s/veh)			30.3				34.2			54.1		
Approach LOS			C				C			D		
Queue Length 50th (ft)		34	201			43	209		11	193		6
Queue Length 95th (ft)		74	347			#117	380		31	263		20
Internal Link Dist (ft)			1288				848			619		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		68	963			61	1061		170	691		222
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.63	0.42			0.89	0.41		0.09	0.37		0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 126.4			
Actuated Cycle Length: 126.4			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 41.8		Intersection LOS: D	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	25.2	
Actuated g/C Ratio	0.20	
v/c Ratio	0.78	
Control Delay (s/veh)	60.6	
Queue Delay	0.0	
Total Delay (s/veh)	60.6	
LOS	E	
Approach Delay (s/veh)	60.0	
Approach LOS	E	
Queue Length 50th (ft)	223	
Queue Length 95th (ft)	301	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

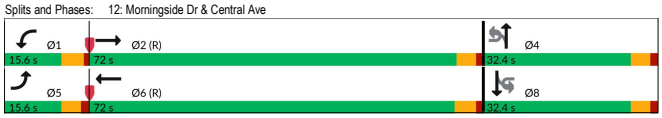
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	426	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	426	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	948	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	444	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	451	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.31			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	7.4			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	7.4			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.3			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	119			25		
Queue Length 95th (ft)		51	203			48	224			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.31			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 15.2		Intersection LOS: B	
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	364	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	364	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	278	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	379	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	379	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

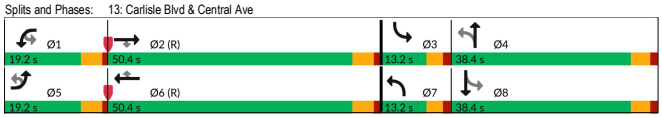
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.53	0.08	0.14	0.78		0.32
Control Delay (s/veh)		443.9	29.9	1.9		176.2	33.0	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		443.9	29.9	1.9		176.2	33.0	0.2	28.4	60.0		32.6
LOS		F	C	A		F	C	A	C	E		C
Approach Delay (s/veh)			107.7				48.2			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~131	221	0		50	229	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	328	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.53	0.08	0.13	0.57		0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 121.2			
Actuated Cycle Length: 121.2			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.78			
Intersection Signal Delay (s/veh): 68.4		Intersection LOS: E	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	
Intersection Summary		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	401	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	401	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00			1.00	1.00			0.94		
Frt			0.990				0.995			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1889	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	969	1872	0	0	1026	1889	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	418	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	433	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.2			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.29			0.35		
Control Delay (s/veh)		64.8	4.3			58.7	6.4			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.8	4.3			58.7	6.4			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.3			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	102			19		
Queue Length 95th (ft)		50	98			46	198			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		98	1471			103	1484			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.29			0.12		

Intersection Summary

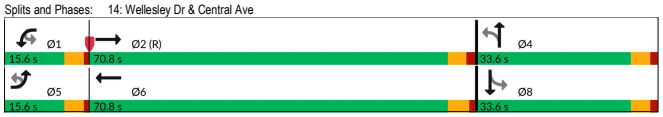
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	

Intersection Summary

Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	398	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	398	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.997			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1893	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	966	1880	0	0	1051	1893	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	415	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	424	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.29			0.39		
Control Delay (s/veh)		60.3	7.3			70.2	3.9			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.3	7.3			70.2	3.9			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				7.4			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	54			32		
Queue Length 95th (ft)		49	259			49	79			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		96	1469			102	1471			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.29			0.15		

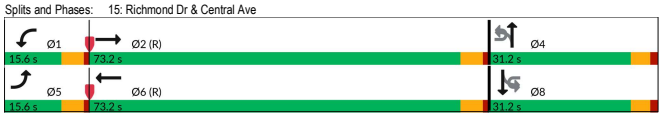
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary	

Intersection Signal Delay (s/veh): 13.6	Intersection LOS: B
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	505	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	505	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.97	0.99			0.98		
Frt			0.993				0.988			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3548	0	0	1731	0	0
Flt Permitted		0.556				0.500				0.873		
Satd. Flow (perm)	0	1025	3574	0	0	925	3548	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				13			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	526	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	572	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.31	0.25			0.38	0.24			0.27		
Control Delay (s/veh)		37.0	8.9			38.7	8.2			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		37.0	8.9			38.7	8.2			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	63			14		
Queue Length 95th (ft)		43	137			51	124			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		143	2391			138	2413			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.27	0.25			0.34	0.24			0.10		

Intersection Summary

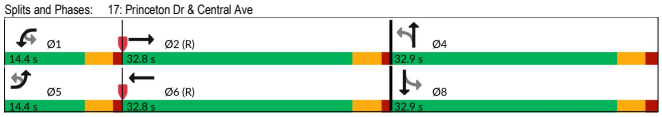
Area Type: Other
Cycle Length: 80.1
Actuated Cycle Length: 80.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary

Intersection Signal Delay (s/veh): 12.4	Intersection LOS: B
Intersection Capacity Utilization 44.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	525	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	525	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				3			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	547	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	560	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

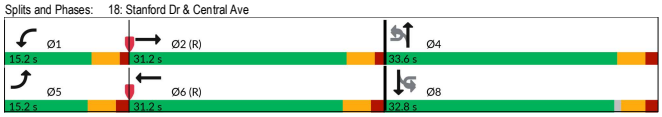
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.19			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.4			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.4			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	28			2		8	1
Queue Length 95th (ft)	36	103			30	86			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.19			0.04		0.03	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



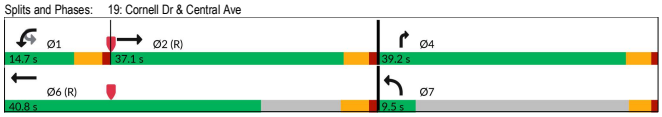
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	533	22	22
Future Volume (vph)	587	58	1	33	533	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	555	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	555	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.17	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.1	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.1	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.7	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	37	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.17	0.03	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 91	
Actuated Cycle Length: 91	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.31	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	84	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	84	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1232			105
Travel Time (s)		32.1				17.0			33.6			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	88	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	91	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			1.72	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			414.5	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			414.5	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				70.8			33.3			44.8
Approach LOS		D				E			C			D
Queue Length 50th (ft)	16	222			~123	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#213	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1152			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			1.72	0.19		0.37	0.05	0.20	0.09	0.15

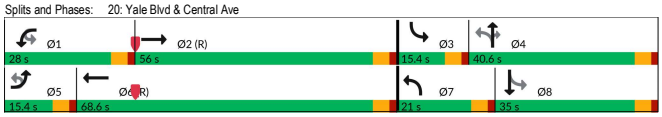
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.72	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 49.5	Intersection LOS: D
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Future Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.97		0.97	0.99		0.99
Frt			0.993				0.960			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	3372	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1881	0	0	151	3372	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				36			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	438	22	10	49	418	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	460	0	0	59	572	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.2			47.1	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.38			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.64			1.44	0.39		0.27	0.72		0.67
Control Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
LOS		F	D			F	C		D	E		E
Approach Delay (s/veh)			75.5				60.8			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	417			~90	210		42	159		168
Queue Length 95th (ft)		#197	553			#206	284		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	724			41	1480		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.64			1.44	0.39		0.18	0.39		0.49

Intersection Summary

Area Type: Other
Cycle Length: 172
Actuated Cycle Length: 172
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.44

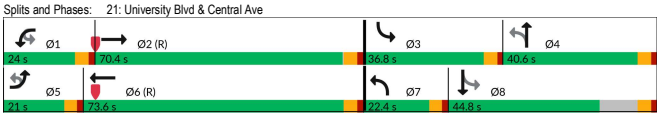
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary

Intersection Signal Delay (s/veh): 68.0 Intersection LOS: E
Intersection Capacity Utilization 73.0% ICU Level of Service C
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Future Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94		1.00			0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.437				0.452			0.950			
Satd. Flow (perm)	0	830	1900	1513	0	858	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							690	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	444	66	6	30	524	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	444	66	0	36	524	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.53		0.04	
Control Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			6.5				5.7			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	122	0		5	98		98		0	
Queue Length 95th (ft)		3	194	14		13	231		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		788	1389	1124		785	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.21		0.04	

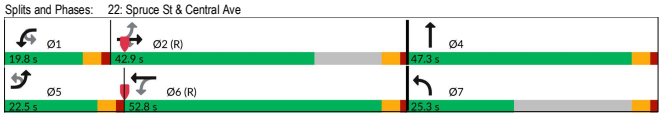
Intersection Summary
Area Type: Other
Cycle Length: 122.6
Actuated Cycle Length: 122.6
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 51.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 22: Spruce St & Central Ave



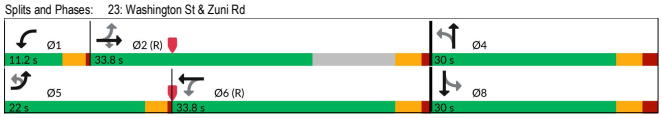
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	714	66	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	714	66	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.987			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3554	0	1805	1834	0	1805	1730
Flt Permitted		0.287			0.425			0.456			0.704	
Satd. Flow (perm)	0	544	3610	1568	805	3554	0	865	1834	0	1337	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		12			16			69
Link Speed (mph)			30			30			30			30
Link Distance (ft)			405			419			441			345
Travel Time (s)			9.2			9.5			10.0			7.8
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	744	69	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	39.4%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		64.6	61.7	61.7	59.0	52.3		12.2	12.2		12.2	12.2
Actuated g/C Ratio		0.75	0.72	0.72	0.69	0.61		0.14	0.14		0.14	0.14
v/c Ratio		0.31	0.23	0.02	0.02	0.37		0.34	0.29		0.34	0.64
Control Delay (s/veh)		5.0	5.3	0.0	3.9	9.8		39.4	28.5		36.7	31.4
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.0	5.3	0.0	3.9	9.8		39.4	28.5		36.7	31.4
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			5.1			9.7			32.2			32.7
Approach LOS			A			A			C			C
Queue Length 50th (ft)		18	41	0	1	101		21	32		32	64
Queue Length 95th (ft)		46	112	0	7	178		49	67		65	123
Internal Link Dist (ft)			325			339			361			265
Turn Bay Length (ft)												
Base Capacity (vph)		681	2594	1148	662	2171		246	535		381	543
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.24	0.23	0.02	0.02	0.37		0.17	0.15		0.17	0.36

Intersection Summary
Area Type: Other
Cycle Length: 85.8
Actuated Cycle Length: 85.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay (s/veh): 12.3 Intersection LOS: B
Intersection Capacity Utilization 64.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 23: Washington St & Zuni Rd



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

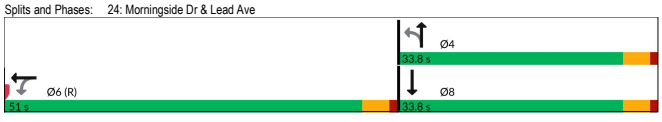
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	856	13	11	10	0	0	17	60
Future Volume (vph)	0	0	0	11	856	13	11	10	0	0	17	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.998						0.895	
Flt Protected					0.999			0.974				
Satd. Flow (prot)	0	0	0	0	3598	0	0	1851	0	0	1679	0
Flt Permitted					0.999			0.904				
Satd. Flow (perm)	0	0	0	0	3598	0	0	1718	0	0	1679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	11	892	14	11	10	0	0	18	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	917	0	0	21	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.46			0.04			0.13	
Control Delay (s/veh)					12.5			18.8			7.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.5			18.8			7.9	
LOS					B			B			A	
Approach Delay (s/veh)					12.5			18.8			7.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					144			7			6	
Queue Length 95th (ft)					191			23			35	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1974			593			621	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.46			0.04			0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 46.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	824	44	156	278	0	0	185	53
Future Volume (vph)	0	0	0	57	824	44	156	278	0	0	185	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						1.00	
Frt					0.993						0.970	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3570	0	1805	1900	0	0	1838	0
Flt Permitted					0.997		0.291					
Satd. Flow (perm)	0	0	0	0	3570	0	553	1900	0	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					10						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	59	858	46	163	290	0	0	193	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	963	0	163	290	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

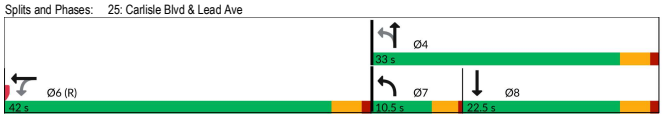
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					42.3		24.7	23.7			13.5	
Actuated g/C Ratio					0.56		0.33	0.32			0.18	
v/c Ratio					0.48		0.55	0.48			0.72	
Control Delay (s/veh)					11.4		27.3	25.1			38.4	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.4		27.3	25.1			38.4	
LOS					B		C	C			D	
Approach Delay (s/veh)					11.4			25.9			38.4	
Approach LOS					B			C			D	
Queue Length 50th (ft)					130		41	81			101	
Queue Length 95th (ft)					202		m78	122			163	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2015		299	722			454	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.48		0.55	0.40			0.55	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 66.2%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	669	127	0	0	0	0	357	78	22	219	0
Future Volume (vph)	76	669	127	0	0	0	0	357	78	22	219	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.978						0.976				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	3504	0	0	0	0	0	1850	0	1805	1900	0
Flt Permitted		0.996								0.204		
Satd. Flow (perm)	0	3504	0	0	0	0	0	1850	0	388	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	79	697	132	0	0	0	0	372	81	23	228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	908	0	0	0	0	0	453	0	23	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

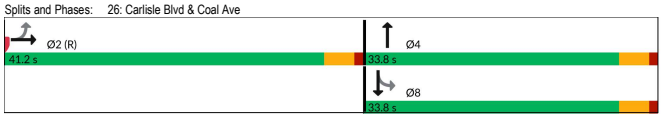
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		43.7						22.3		22.3	22.3	
Actuated g/C Ratio		0.58						0.30		0.30	0.30	
v/c Ratio		0.44						0.81		0.20	0.40	
Control Delay (s/veh)		10.2						34.4		39.2	39.4	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		10.2						34.4		39.2	39.4	
LOS		B						C		D	D	
Approach Delay (s/veh)		10.2						34.4			39.4	
Approach LOS		B						C			D	
Queue Length 50th (ft)		108						185		11	114	
Queue Length 95th (ft)		188						253		m19	159	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2055						733		151	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.44						0.62		0.15	0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 21.5	Intersection LOS: C
Intersection Capacity Utilization 66.2%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	747	8	0	0	0	0	7	9	11	10	0
Future Volume (vph)	13	747	8	0	0	0	0	7	9	11	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.924				
Flt Protected		0.999									0.974	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1756	0	0	1851	0
Flt Permitted		0.999									0.974	
Satd. Flow (perm)	0	3599	0	0	0	0	0	1756	0	0	1851	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			644			657			532	
Travel Time (s)		31.0			14.6			14.9			12.1	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	778	8	0	0	0	0	7	9	11	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	800	0	0	0	0	0	16	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

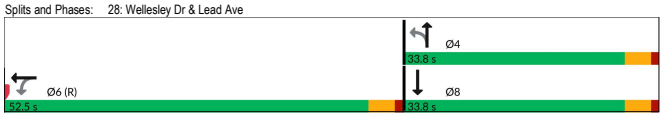
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	877	11	13	17	0	0	7	27
Future Volume (vph)	0	0	0	10	877	11	13	17	0	0	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.892	
Flt Protected					0.999			0.979				
Satd. Flow (prot)	0	0	0	0	3598	0	0	1860	0	0	1672	0
Flt Permitted					0.999			0.920				
Satd. Flow (perm)	0	0	0	0	3598	0	0	1746	0	0	1672	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	10	914	11	14	18	0	0	7	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	935	0	0	32	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.47			0.05			0.06	
Control Delay (s/veh)					12.4			19.6			9.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.4			19.6			9.4	
LOS					B			B			A	
Approach Delay (s/veh)					12.4			19.6			9.4	
Approach LOS					B			B			A	
Queue Length 50th (ft)					148			12			3	
Queue Length 95th (ft)					195			31			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					2002			592			586	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.47			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

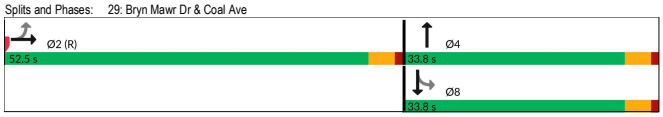


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	866	10	0	0	0	0	5	0	5	6	0
Future Volume (vph)	11	866	10	0	0	0	0	5	0	5	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00									1.00	
Frt		0.998										
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1900	0	0	1858	0
Flt Permitted		0.999									0.947	
Satd. Flow (perm)	0	3598	0	0	0	0	0	1900	0	0	1794	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	902	10	0	0	0	0	5	0	5	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	923	0	0	0	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.46						0.01			0.02	
Control Delay (s/veh)		12.3						19.0			19.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		12.3						19.0			19.2	
LOS		B						B			B	
Approach Delay (s/veh)		12.3						19.0			19.2	
Approach LOS		B						B			B	
Queue Length 50th (ft)		146						2			4	
Queue Length 95th (ft)		192						9			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2002						645			609	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.46						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

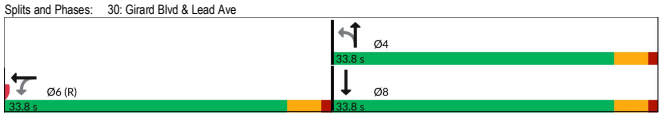


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	925	41	48	208	0	0	175	76
Future Volume (vph)	0	0	0	41	925	41	48	208	0	0	175	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			1.00	
Frt					0.994						0.959	
Flt Protected					0.998			0.991				
Satd. Flow (prot)	0	0	0	0	3578	0	0	1883	0	0	1814	0
Flt Permitted					0.998			0.755				
Satd. Flow (perm)	0	0	0	0	3578	0	0	1434	0	0	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			2			5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	43	964	43	50	217	0	0	182	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1050	0	0	267	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					43.5			15.1			15.1	
Actuated g/C Ratio					0.64			0.22			0.22	
v/c Ratio					0.46			0.83			0.60	
Control Delay (s/veh)					7.6			46.1			24.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					7.6			46.1			24.6	
LOS					A			D			C	
Approach Delay (s/veh)					7.6			46.1			24.6	
Approach LOS					A			D			C	
Queue Length 50th (ft)					97			106			81	
Queue Length 95th (ft)					180			164			131	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					2304			621			809	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.46			0.43			0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 16.9		Intersection LOS: B	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

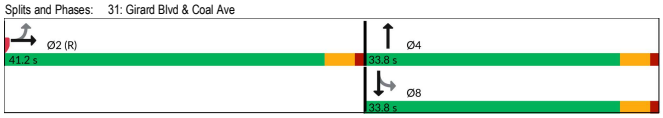


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	852	55	0	0	0	0	175	44	44	170	0
Future Volume (vph)	81	852	55	0	0	0	0	175	44	44	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.992						0.973				
Flt Protected		0.996									0.990	
Satd. Flow (prot)	0	3562	0	0	0	0	0	1844	0	0	1881	0
Flt Permitted		0.996									0.724	
Satd. Flow (perm)	0	3561	0	0	0	0	0	1844	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11						20				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	888	57	0	0	0	0	182	46	46	177	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1029	0	0	0	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3			14.3	
Actuated g/C Ratio		0.69						0.19			0.19	
v/c Ratio		0.42						0.62			0.85	
Control Delay (s/veh)		18.5						32.2			56.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		18.5						32.2			56.6	
LOS		B						C			E	
Approach Delay (s/veh)		18.5						32.2			56.6	
Approach LOS		B						C			E	
Queue Length 50th (ft)		235						89			101	
Queue Length 95th (ft)		303						142			162	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2459						732			537	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.42						0.31			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 26.3		Intersection LOS: C	
Intersection Capacity Utilization 62.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave

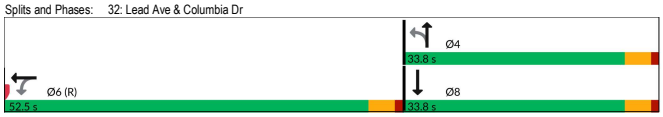


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	954	16	12	23	0	0	15	19
Future Volume (vph)	0	0	0	32	954	16	12	23	0	0	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.925	
Flt Protected					0.998			0.983				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1868	0	0	1736	0
Flt Permitted					0.998			0.936				
Satd. Flow (perm)	0	0	0	0	3592	0	0	1777	0	0	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	994	17	13	24	0	0	16	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1044	0	0	37	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.52			0.06			0.06	
Control Delay (s/veh)					13.1			19.7			12.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.1			19.7			12.0	
LOS					B			B			B	
Approach Delay (s/veh)					13.1			19.7			12.0	
Approach LOS					B			B			B	
Queue Length 50th (ft)					173			13			6	
Queue Length 95th (ft)					225			34			26	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1999			603			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.52			0.06			0.06	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.52
Intersection Signal Delay (s/veh): 13.3 Intersection LOS: B
Intersection Capacity Utilization 52.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 32: Lead Ave & Columbia Dr

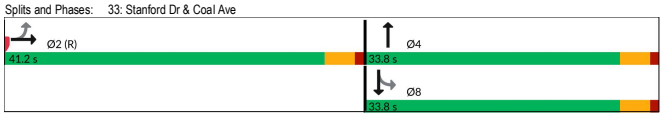


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	919	6	0	0	0	0	6	7	13	6	0
Future Volume (vph)	24	919	6	0	0	0	0	6	7	13	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.927				
Flt Protected		0.999									0.966	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1744	0	0	1835	0
Flt Permitted		0.999									0.896	
Satd. Flow (perm)	0	3602	0	0	0	0	0	1744	0	0	1695	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2				3		3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	957	6	0	0	0	0	6	7	14	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	988	0	0	0	0	0	13	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.56						0.02			0.03	
Control Delay (s/veh)		15.0						10.7			14.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		15.0						10.7			14.4	
LOS		B						B			B	
Approach Delay (s/veh)		15.0						10.7			14.4	
Approach LOS		B						B			B	
Queue Length 50th (ft)		160						2			6	
Queue Length 95th (ft)		215						12			18	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1763						685			662	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.56						0.02			0.03	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay (s/veh): 14.9 Intersection LOS: B
Intersection Capacity Utilization 48.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave



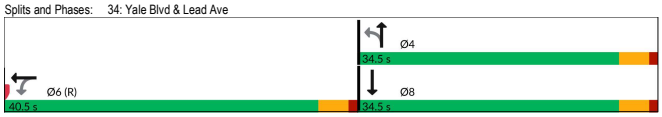
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	204	828	26	117	188	0	0	177	39
Future Volume (vph)	0	0	0	204	828	26	117	188	0	0	177	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.995							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3586	0	1805	1900	0	0	1900	1615
Flt Permitted				0.950			0.524					
Satd. Flow (perm)	0	0	0	1756	3586	0	994	1900	0	0	1900	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6							87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	13		13	13		13	2		2	2		2
Confl. Bikes (#/hr)			1			7						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	213	863	27	122	196	0	0	184	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	213	890	0	122	196	0	0	184	41
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				52.4	52.4		13.6	13.6			13.6	75.0
Actuated g/C Ratio				0.70	0.70		0.18	0.18			0.18	1.00
v/c Ratio				0.17	0.36		0.68	0.57			0.53	0.03
Control Delay (s/veh)				5.1	5.6		46.4	33.7			32.6	0.0
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				5.1	5.6		46.4	33.7			32.6	0.0
LOS				A	A		D	C			C	A
Approach Delay (s/veh)					5.5			38.6			26.7	
Approach LOS					A			D			C	
Queue Length 50th (ft)				27	69		54	85			79	0
Queue Length 95th (ft)				68	134		98	131			123	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1226	2506		397	760			760	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.17	0.36		0.31	0.26			0.24	0.03

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	

Intersection Signal Delay (s/veh): 14.8		Intersection LOS: B	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 34: Yale Blvd & Lead Ave



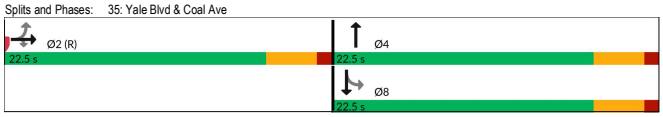
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	822	67	0	0	0	0	281	194	38	323	0
Future Volume (vph)	47	822	67	0	0	0	0	281	194	38	323	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97					0.99		1.00		
Frt			0.850					0.945				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1785	0	1805	1900	0
Flt Permitted	0.950									0.266		
Satd. Flow (perm)	1798	3610	1572	0	0	0	0	1785	0	504	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70					61				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	856	70	0	0	0	0	293	202	40	336	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	856	70	0	0	0	0	495	0	40	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	20.8	20.8	20.8					15.2		15.2	15.2	
Actuated g/C Ratio	0.46	0.46	0.46					0.34		0.34	0.34	
v/c Ratio	0.06	0.51	0.09					0.77		0.24	0.52	
Control Delay (s/veh)	8.3	10.7	3.3					20.0		13.3	14.5	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	8.3	10.7	3.3					20.0		13.3	14.5	
LOS	A	B	A					C		B	B	
Approach Delay (s/veh)		10.0						20.0			14.4	
Approach LOS		B						C			B	
Queue Length 50th (ft)	7	78	0					91		7	65	
Queue Length 95th (ft)	22	131	16					165		23	111	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	832	1670	764					750		201	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.06	0.51	0.09					0.66		0.20	0.44	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

Intersection Signal Delay (s/veh): 13.6 Intersection LOS: B
Intersection Capacity Utilization 67.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 35: Yale Blvd & Coal Ave

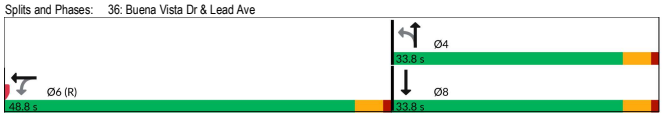


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Future Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.997						0.922	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	3593	0	0	1830	0	0	1735	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	3592	0	0	1503	0	0	1735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	903	18	81	23	0	0	8	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	939	0	0	104	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.49			0.20			0.03	
Control Delay (s/veh)					13.0			19.8			11.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.0			19.8			11.9	
LOS					B			B			B	
Approach Delay (s/veh)					13.0			19.8			11.9	
Approach LOS					B			B			B	
Queue Length 50th (ft)					149			37			3	
Queue Length 95th (ft)					197			73			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1928			533			622	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.49			0.20			0.03	

Intersection Summary
Area Type: Other
Cycle Length: 82.6
Actuated Cycle Length: 82.6
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.49
Intersection Signal Delay (s/veh): 13.7 Intersection LOS: B
Intersection Capacity Utilization 50.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 36: Buena Vista Dr & Lead Ave

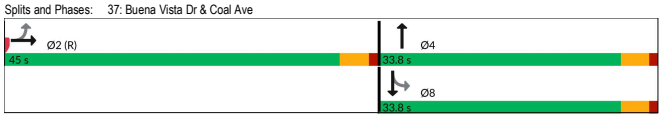


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Future Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.993						0.953				
Flt Protected		0.998									0.976	
Satd. Flow (prot)	0	3571	0	0	0	0	0	1799	0	0	1854	0
Flt Permitted		0.998									0.795	
Satd. Flow (perm)	0	3569	0	0	0	0	0	1799	0	0	1503	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9						35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	885	45	0	0	0	0	65	35	18	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	966	0	0	0	0	0	100	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		20	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		20	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.4						8.8			8.8	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.33						0.43			0.22	
Control Delay (s/veh)		2.9						28.2			34.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.9						28.2			34.7	
LOS		A						C			C	
Approach Delay (s/veh)		2.9						28.2			34.7	
Approach LOS		A						C			C	
Queue Length 50th (ft)		52						30			17	
Queue Length 95th (ft)		91						73			43	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2917						690			558	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.33						0.14			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Future Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	0.91	1.00	1.00	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850						0.972
Flt Protected					0.997			0.950				
Satd. Flow (prot)	0	0	0	0	3599	1615	0	1805	5187	0	0	5042
Flt Permitted					0.997			0.341				
Satd. Flow (perm)	0	0	0	0	3599	1589	0	648	5187	0	0	5042
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						100						66
Link Speed (mph)		30			30				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		48.6			22.7				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	55	856	100	1	97	335	0	0	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	911	100	0	98	335	0	0	558
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	2			2
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	20	100			100
Trailing Detector (ft)				0	0	0	0	0	0			0
Detector 1 Position(ft)				0	0	0	0	0	0			0
Detector 1 Size(ft)				20	6	20	20	20	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94				94			94
Detector 2 Size(ft)					6				6			6
Detector 2 Type					Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	104
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

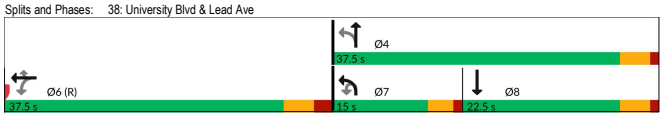
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0				0.0			0.0
Turn Type				Perm	NA	Perm	custom	pm+pt	NA			NA
Protected Phases					6			7	4			8
Permitted Phases				6		6	7	4				
Detector Phase				6	6	6	7	7	4			8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	20.0%	50.0%			30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	11.0	33.0			18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.0	3.5			3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0	1.0			1.0
Lost Time Adjust (s)					0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)					5.5	5.5		4.0	4.5			4.5
Lead/Lag							Lead	Lead				Lag
Lead-Lag Optimize?							Yes	Yes				Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0			7.0			7.0
Flash Don't Walk (s)				23.0	23.0	23.0			10.0			10.0
Pedestrian Calls (#/hr)				0	0	0			0			0
Act Effct Green (s)					32.0	32.0		33.5	33.0			24.3
Actuated g/C Ratio					0.43	0.43		0.45	0.44			0.32
v/c Ratio					0.59	0.14		0.25	0.15			0.33
Control Delay (s/veh)					18.5	3.6		14.0	12.8			18.4
Queue Delay					0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)					18.5	3.6		14.0	12.8			18.4
LOS					B	A		B	B			B
Approach Delay (s/veh)					17.0				13.1			18.4
Approach LOS					B				B			B
Queue Length 50th (ft)					164	0		26	32			64
Queue Length 95th (ft)					222	25		52	49			97
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125				
Base Capacity (vph)					1535	735		459	2282			1675
Starvation Cap Reductn					0	0		0	0			0
Spillback Cap Reductn					0	0		0	0			0
Storage Cap Reductn					0	0		0	0			0
Reduced v/c Ratio					0.59	0.14		0.21	0.15			0.33

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 16.6	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



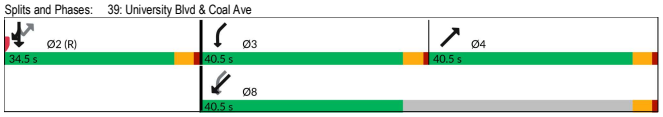
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Future Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.462		
Satd. Flow (perm)	0	0	0	1803	3610	1615	0	5187	1579	877	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			119			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.07	0.81	0.17		0.21	0.08	0.14	0.11	
Control Delay (s/veh)				32.9	48.1	13.8		29.7	0.1	7.5	7.2	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.9	48.1	13.8		29.7	0.1	7.5	7.2	
LOS				C	D	B		C	A	A	A	
Approach Delay (s/veh)					44.4			22.0			7.3	
Approach LOS					D			C			A	
Queue Length 50th (ft)				19	280	12		67	0	31	32	
Queue Length 95th (ft)				44	354	51		93	0	53	45	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				468	937	461		1616	1579	870	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.07	0.81	0.17		0.21	0.08	0.14	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 28.8		Intersection LOS: C	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 39: University Blvd & Coal Ave

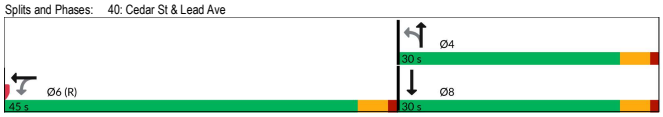


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Future Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.997						0.880	
Flt Protected					0.999			0.991				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1883	0	0	1650	0
Flt Permitted					0.999			0.929				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1765	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						75	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	20	1084	19	6	26	0	0	26	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1123	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.5			12.5			12.5	
Actuated g/C Ratio					0.71			0.17			0.17	
v/c Ratio					0.44			0.11			0.69	
Control Delay (s/veh)					5.5			25.1			30.1	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					5.5			25.1			30.1	
LOS					A			C			C	
Approach Delay (s/veh)					5.5			25.1			30.1	
Approach LOS					A			C			C	
Queue Length 50th (ft)					61			13			69	
Queue Length 95th (ft)					149			32			127	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2564			600			610	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.44			0.05			0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 10.0		Intersection LOS: B	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

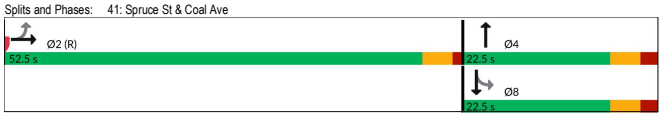


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Future Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1703	0	0	1847	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	3601	0	0	0	0	0	1703	0	0	1874	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	855	6	0	0	0	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	872	0	0	0	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		67.8						8.0			8.0	
Actuated g/C Ratio		0.90						0.11			0.11	
v/c Ratio		0.27						0.03			0.16	
Control Delay (s/veh)		1.7						23.2			32.5	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.7						23.2			32.5	
LOS		A						C			C	
Approach Delay (s/veh)		1.7						23.2			32.5	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			13	
Queue Length 95th (ft)		68						12			38	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3255						389			424	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.27						0.02			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 2.9		Intersection LOS: A	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Future Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1585	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						143	77					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

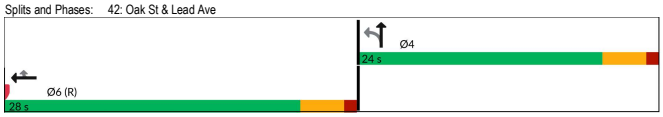
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					29.4	29.4	13.6	13.6				
Actuated g/C Ratio					0.57	0.57	0.26	0.26				
v/c Ratio					0.24	0.71	0.15	0.61				
Control Delay (s/veh)					6.6	13.9	4.5	19.3				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.6	13.9	4.5	19.3				
LOS					A	B	A	B				
Approach Delay (s/veh)					10.2			17.5				
Approach LOS					B			B				
Queue Length 50th (ft)					34	98	0	82				
Queue Length 95th (ft)					64	#326	20	106				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2934	958	725	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.24	0.71	0.11	0.43				

Intersection Summary

Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 12.6 Intersection LOS: B
Intersection Capacity Utilization 63.5% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Future Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.963				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	4995	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	4995	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	418							67				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	418	834	0	0	0	0	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	834	0	0	0	0	0	311	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.35	0.42						0.27				
Control Delay (s/veh)	1.6	6.6						12.0				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	1.6	6.6						12.0				
LOS	A	A						B				
Approach Delay (s/veh)		4.9						12.0				
Approach LOS		A						B				
Queue Length 50th (ft)	0	55						19				
Queue Length 95th (ft)	26	84						36				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	1188	2005						1928				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.35	0.42						0.16				

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	

Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

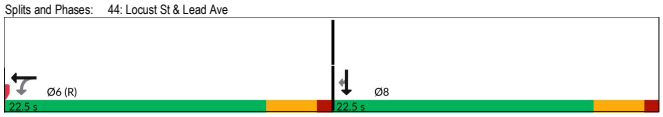
Splits and Phases: 43: Oak St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Future Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor											1.00	0.99
Frt											0.955	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1787	3610	0	0	0	0	0	3289	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1787	3610	0	0	0	0	0	3289	1450
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				182							120	120
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Peds. (#/hr)	1		1				1		1	2		2
Confl. Bikes (#/hr)			1			10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	182	669	0	0	0	0	0	391	416
Shared Lane Traffic (%)												40%
Lane Group Flow (vph)	0	0	0	182	669	0	0	0	0	0	557	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.2	22.2						13.8	13.8
Actuated g/C Ratio				0.49	0.49						0.31	0.31
v/c Ratio				0.19	0.38						0.51	0.48
Control Delay (s/veh)				2.5	8.7						11.1	9.3
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.5	8.7						11.1	9.3
LOS				A	A						B	A
Approach Delay (s/veh)					7.3						10.5	
Approach LOS					A						B	
Queue Length 50th (ft)				0	50						48	27
Queue Length 95th (ft)				26	98						70	64
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)				975	1784						1387	652
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.19	0.38						0.40	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

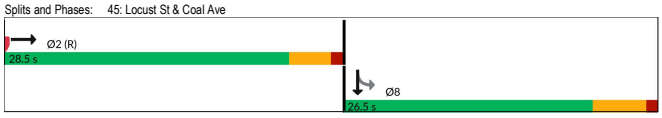


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Future Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00										
Frt		0.984										
Flt Protected										0.950	0.974	
Satd. Flow (prot)	0	5094	0	0	0	0	0	0	0	1643	3368	0
Flt Permitted										0.950	0.974	
Satd. Flow (perm)	0	5094	0	0	0	0	0	0	0	1643	3368	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		47								84	84	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	841	99	0	0	0	0	0	0	418	184	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	209	393	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	
Permitted Phases										8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2									8	8
Switch Phase												
Minimum Initial (s)		10.0									10.0	10.0
Minimum Split (s)		28.5									26.5	26.5
Total Split (s)		28.5									26.5	26.5
Total Split (%)		51.8%									48.2%	48.2%
Maximum Green (s)		24.0									21.0	21.0
Yellow Time (s)		3.5									4.5	4.5
All-Red Time (s)		1.0									1.0	1.0
Lost Time Adjust (s)		0.0									0.0	0.0
Total Lost Time (s)		4.5									5.5	5.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0									2.0	2.0
Recall Mode		C-Max									None	None
Walk Time (s)		7.0									7.0	7.0
Flash Don't Walk (s)		13.0									10.0	10.0
Pedestrian Calls (#/hr)		0									0	0
Act Effct Green (s)		33.4									11.6	11.6
Actuated g/C Ratio		0.61									0.21	0.21
v/c Ratio		0.30									0.51	0.51
Control Delay (s/veh)		5.5									15.8	16.9
Queue Delay		0.0									0.0	0.0
Total Delay (s/veh)		5.5									15.8	16.9
LOS		A									B	B
Approach Delay (s/veh)		5.5										16.6
Approach LOS		A										B
Queue Length 50th (ft)		39									39	50
Queue Length 95th (ft)		76									84	75
Internal Link Dist (ft)		280			272			72				117
Turn Bay Length (ft)												
Base Capacity (vph)		3111									679	1337
Starvation Cap Reductn		0									0	0
Spillback Cap Reductn		0									0	0
Storage Cap Reductn		0									0	0
Reduced v/c Ratio		0.30									0.31	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 9.8		Intersection LOS: A	
Intersection Capacity Utilization 41.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave



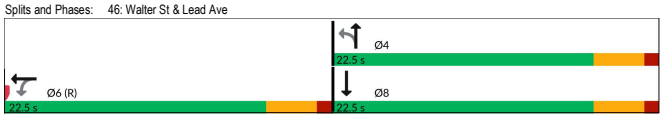
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Future Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.946	
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1870	0	0	1788	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3597	0	0	1900	0	0	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	24	964	16	3	6	0	0	6	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1004	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.30			0.03			0.03	
Control Delay (s/veh)					2.0			24.6			13.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					2.0			24.6			13.4	
LOS					A			C			B	
Approach Delay (s/veh)					2.0			24.6			13.4	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			2			1	
Queue Length 95th (ft)					135			m12			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3325			760			717	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.30			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave

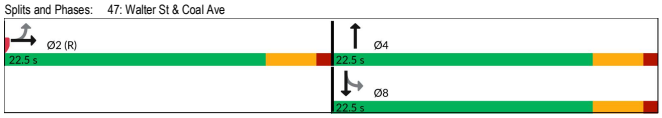


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Future Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.999						0.908				
Flt Protected											0.994	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1725	0	0	1889	0
Flt Permitted											0.957	
Satd. Flow (perm)	0	3606	0	0	0	0	0	1725	0	0	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						15				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	869	4	0	0	0	0	7	15	4	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	876	0	0	0	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		38.2						8.0			8.0	
Actuated g/C Ratio		0.85						0.18			0.18	
v/c Ratio		0.29						0.07			0.11	
Control Delay (s/veh)		2.6						11.1			20.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.6						11.1			20.6	
LOS		A						B			C	
Approach Delay (s/veh)		2.6						11.1			20.6	
Approach LOS		A						B			C	
Queue Length 50th (ft)		0						2			10	
Queue Length 95th (ft)		70						15			31	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3061						699			727	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.29						0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Future Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1805	3610	0	0	3610
Flt Permitted				0.950				0.340				
Satd. Flow (perm)	0	0	0	1803	3610	1583	0	646	3610	0	0	3610
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						52						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	73	806	70	1	108	438	0	0	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	806	70	0	109	438	0	0	553
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			1
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			10
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			10
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	144
Future Volume (vph)	144
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	117
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	150
Shared Lane Traffic (%)	
Lane Group Flow (vph)	150
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	10
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	10
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

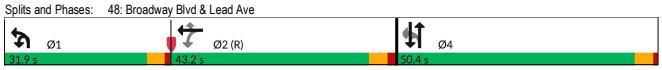
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				43.2	43.2	43.2	26.4	26.4	50.4			50.4
Total Split (s)				43.2	43.2	43.2	31.9	31.9	50.4			50.4
Total Split (%)				34.4%	34.4%	34.4%	25.4%	25.4%	40.2%			40.2%
Maximum Green (s)				38.2	38.2	38.2	27.4	27.4	45.9			45.9
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				61.4	61.4	61.4		50.1	45.9			45.9
Actuated g/C Ratio				0.49	0.49	0.49		0.40	0.37			0.37
v/c Ratio				0.08	0.46	0.09		0.37	0.33			0.42
Control Delay (s/veh)				17.5	22.2	6.8		28.8	29.6			31.0
Queue Delay				0.0	0.0	0.0		0.0	0.9			0.0
Total Delay (s/veh)				17.5	22.2	6.8		28.8	30.6			31.0
LOS				B	C	A		C	C			C
Approach Delay (s/veh)					20.7				30.2			26.2
Approach LOS					C				C			C
Queue Length 50th (ft)				31	220	7		52	134			175
Queue Length 95th (ft)				58	275	33		90	178			227
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				881	1765	800		630	1320			1320
Starvation Cap Reductn				0	0	0		0	597			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.08	0.46	0.09		0.17	0.61			0.42

Intersection Summary
Area Type: Other
Cycle Length: 125.5
Actuated Cycle Length: 125.5
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.23
Control Delay (s/veh)	8.6
Queue Delay	0.0
Total Delay (s/veh)	8.6
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	17
Queue Length 95th (ft)	63
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	649
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.23
Intersection Summary	

Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



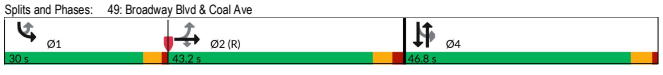
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Future Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.98		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	0	1805	3610
Flt Permitted	0.950										0.383	
Satd. Flow (perm)	1796	3610	1576	0	0	0	0	3610	1591	0	727	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			80						64			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		10.8			25.1			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	688	80	0	0	0	0	488	60	2	95	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	688	80	0	0	0	0	488	60	0	97	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7					41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	37.7	37.7	37.7					41.8	41.8		67.8	41.8
Actuated g/C Ratio	0.31	0.31	0.31					0.35	0.35		0.57	0.35
v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.42
Control Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	31.2
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	1.4
Total Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	32.5
LOS	C	D	A					C	A		B	C
Approach Delay (s/veh)		34.1						27.9				29.4
Approach LOS		C						C				C
Queue Length 50th (ft)	28	236	0					148	0		30	164
Queue Length 95th (ft)	59	301	36					196	28		53	215
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	564	1134	549					1257	595		639	1257
Starvation Cap Reductn	0	0	0					0	0		0	501
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.9		Intersection LOS: C	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

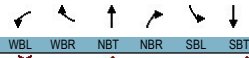
Splits and Phases: 49: Broadway Blvd & Coal Ave



Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lanes, Volumes, Timings
50: Yale Blvd & Garfield Ave 02/17/2025



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	31	490
Future Volume (vph)	42	46	513	33	31	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.997
Satd. Flow (prot)	1726	0	1885	0	0	1894
Flt Permitted	0.977					0.997
Satd. Flow (perm)	1726	0	1885	0	0	1894
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	32	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	542
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

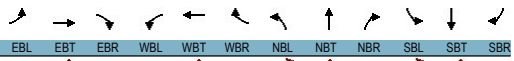
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

Lanes, Volumes, Timings
51: Girard Blvd & Garfield Ave 02/17/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	20	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	20	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.974			0.996			0.986	
Flt Protected		0.980			0.990			0.998			0.997	
Satd. Flow (prot)	0	1815	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.980			0.990			0.998			0.997	
Satd. Flow (perm)	0	1815	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5			2		2	2			2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	21	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lanes, Volumes, Timings
52: Carlisle Blvd & Garfield Ave 02/17/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	13	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	13	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.943			0.968			0.997			0.997	
Flt Protected		0.992			0.986		0.950			0.950		
Satd. Flow (prot)	0	1777	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.992			0.986		0.950			0.950		
Satd. Flow (perm)	0	1777	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	14	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lanes, Volumes, Timings
53: Morningside Dr & Garfield Ave 02/17/2025

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	11	15	15	6	2
Future Volume (vph)	5	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.907			0.966		
Flt Protected	0.985			0.976		
Satd. Flow (prot)	1697	0	0	1854	1835	0
Flt Permitted	0.985			0.976		
Satd. Flow (perm)	1697	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.6%	ICU Level of Service	A
Analysis Period (min)	15		

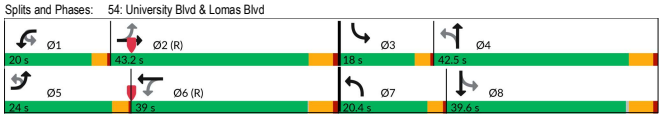
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

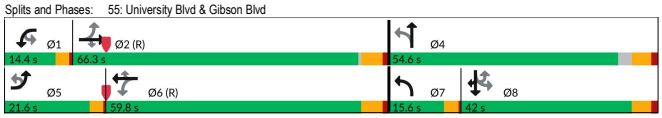
Intersection Summary	
Area Type:	Other
Cycle Length: 139	
Actuated Cycle Length: 139	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay (s/veh): 22.9	Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	340	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	340	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92			1.00		0.99	0.96		
Frt				0.850			0.992			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3576	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	266	1900	1489	0	500	3576	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	354	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	375	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.93	0.47	0.09		0.68	0.27		0.22	0.80		
Control Delay (s/veh)		934.3	28.1	1.7		102.7	28.4		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		934.3	28.1	1.7		102.7	28.4		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			239.8				36.0			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~239	282	0		35	115		28	193		
Queue Length 95th (ft)		#401	410	12		#104	155		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		54	938	786		69	1405		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.93	0.47	0.09		0.62	0.27		0.18	0.66		

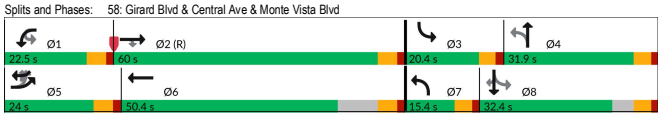
Intersection Summary
Area Type: Other
Cycle Length: 134.8
Actuated Cycle Length: 134.8
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.93

Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 114.0 Intersection LOS: F
Intersection Capacity Utilization 83.8% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1246	0	0	0
Future Volume (vph)	0	0	1246	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	1298	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1298	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)	1	1		1								4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

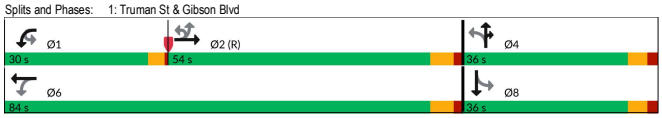
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	

Intersection Summary	

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4 Intersection LOS: B
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

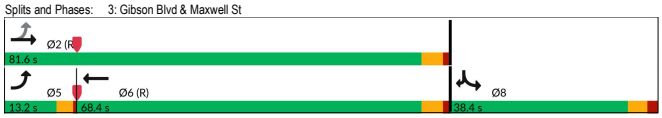
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39

Intersection Signal Delay (s/veh): 5.2 Intersection LOS: A
Intersection Capacity Utilization 44.8% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

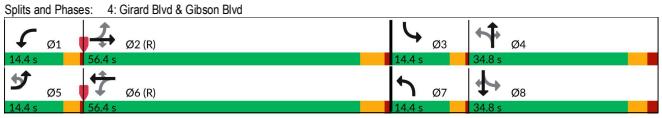
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection Signal Delay (s/veh): 19.4 Intersection LOS: B
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

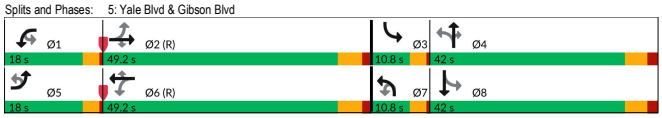
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

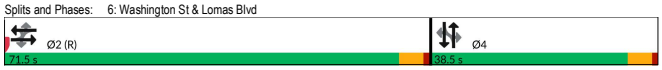
Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.4	Intersection LOS: B
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



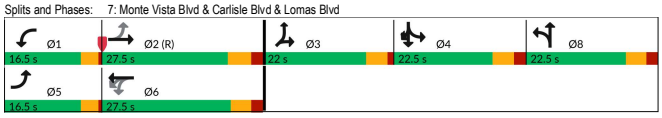
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			350	
Travel Time (s)	17.3			6.8	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			270	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

Intersection Summary

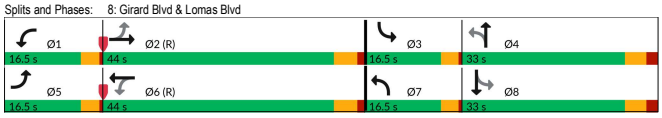
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay (s/veh): 21.4 Intersection LOS: C
Intersection Capacity Utilization 69.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

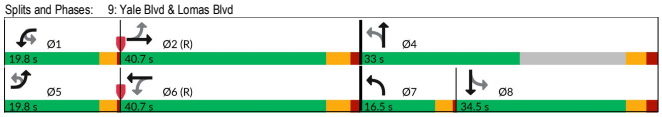
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08
Intersection Summary		

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



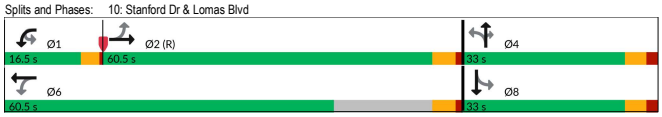
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

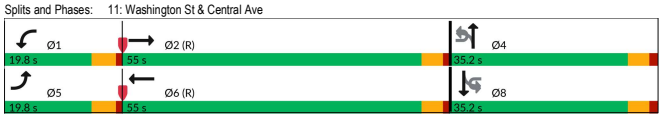
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	45	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	45	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			697			3147
Travel Time (s)		26.6				18.1			15.8			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	48	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	48	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.40	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		51.8	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		51.8	52.4		31.2	42.3
LOS	D	B			D	A		D	D		C	D
Approach Delay (s/veh)		16.5				10.3			52.3			41.2
Approach LOS		B				B			D			D
Queue Length 50th (ft)	18	25			12	56		31	106		12	119
Queue Length 95th (ft)	44	193			33	110		67	166		32	182
Internal Link Dist (ft)		1288				848			617			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.21	0.31		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 28.0		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

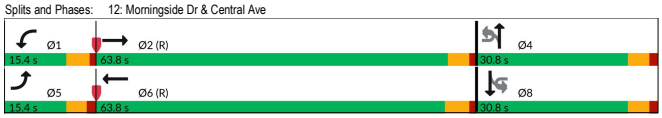
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	275	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	275	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998				0.999			0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1898	0	0	1832	0	0
Flt Permitted										0.936		
Satd. Flow (perm)	0	1879	1895	0	0	1886	1898	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	293	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	294	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.19			0.36		
Control Delay (s/veh)		44.9	2.3			55.7	2.9			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			55.7	2.9			49.7		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			4.4				3.5			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m10	107			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1586			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.19			0.12		

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 10.4		Intersection LOS: B	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	262	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	262	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	818	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	279	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	279	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.26	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.4	16.0	0.2		76.8	20.1	0.3	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.4	16.0	0.2		76.8	20.1	0.3	29.0	51.2		30.0
LOS		E	B	A		E	C	A	C	D		C
Approach Delay (s/veh)			21.5				26.5			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		31	81	0	12	123		19
Queue Length 95th (ft)		65	91	1		72	203	1	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.26	0.01	0.09	0.33		0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 34.6		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Carlisle Blvd & Central Ave

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	276	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	276	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996				0.999			0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1898	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1877	1891	0	0	1900	1898	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	294	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	295	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.17			0.17		
Control Delay (s/veh)		52.8	1.8			45.7	1.4			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			45.7	1.4			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				3.1			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			7	0			11		
Queue Length 95th (ft)		25	45			m29	27			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		185	1711			188	1721			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.17			0.05		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.17

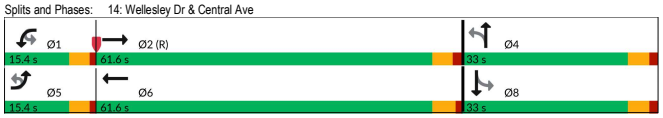
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 35.9%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	262	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	262	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.996			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1891	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1891	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	279	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	286	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.17			0.18		
Control Delay (s/veh)		48.6	2.5			46.6	0.4			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			46.6	0.4			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.0			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			6	0			14		
Queue Length 95th (ft)		15	85			27	7			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1719			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.17			0.06		

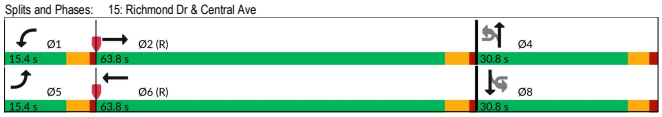
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary	

Intersection Signal Delay (s/veh): 5.4	Intersection LOS: A
Intersection Capacity Utilization 32.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	333	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	333	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.988			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3559	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1531	3577	0	0	1886	3559	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				12			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	354	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	384	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.13			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.1			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	68			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		227	3070			257	2871			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.13			0.03		

Intersection Summary

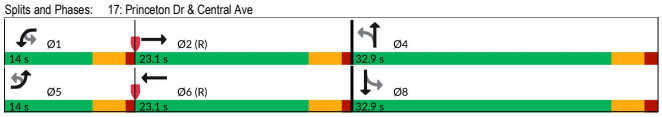
Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.18

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	351	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	351	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	373	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	378	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.12			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.4			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	62			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.12			0.04		0.01

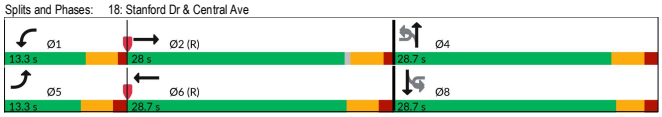
Intersection Summary	
Area Type:	Other
Cycle Length: 70.7	
Actuated Cycle Length: 70.7	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.13	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



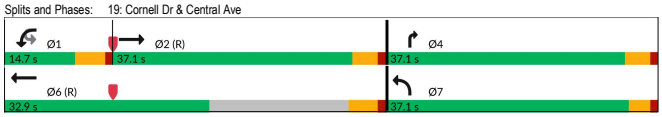
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	330	20	12
Future Volume (vph)	346	31	2	26	330	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	351	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	351	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.11	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				4.0	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	24	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.11	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.1	Intersection LOS: A
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	69	78	271	6	73	19	61	7	12
Future Volume (vph)	1	11	281	69	78	271	6	73	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.971			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3483	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.432			0.744	
Satd. Flow (perm)	0	1711	3483	0	1781	3596	0	813	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			24			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1274			105
Travel Time (s)			32.1			17.0			34.7			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	73	83	288	6	78	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	372	0	83	294	0	78	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	93.8		11.8	104.2		19.4	17.0	17.0	10.9	8.1
Actuated g/C Ratio		0.06	0.67		0.08	0.74		0.14	0.12	0.12	0.08	0.06
v/c Ratio		0.13	0.16		0.55	0.11		0.41	0.09	0.21	0.06	0.18
Control Delay (s/veh)		55.0	7.7		74.3	7.2		57.7	52.8	1.5	47.1	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.0	7.7		74.3	7.2		57.7	52.8	1.5	47.1	50.5
LOS		D	A		E	A		E	D	A	D	D
Approach Delay (s/veh)			9.3			22.0			34.7			49.6
Approach LOS			A			C			C			D
Queue Length 50th (ft)		10	67		74	33		62	15	0	5	11
Queue Length 95th (ft)		m28	98		127	80		109	43	0	19	39
Internal Link Dist (ft)			1332			670			1194			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2342		296	2677		240	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.16		0.28	0.11		0.33	0.04	0.13	0.04	0.05

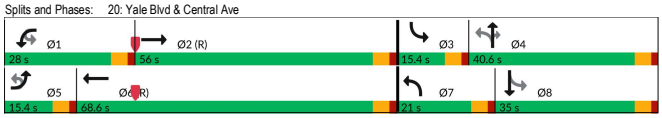
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.8	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Future Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.96	0.98		0.98	1.00		0.99
Frt			0.988				0.944			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1874	0	0	1805	3330	0	1805	5095	0	1805
Flt Permitted		0.348				0.221			0.530			0.247
Satd. Flow (perm)	0	656	1874	0	0	403	3330	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				95			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	232	20	4	36	215	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	252	0	0	40	343	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.8			19.9	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.42	0.26			0.70	0.18		0.14	0.69		0.49
Control Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.4				22.0			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	130			37	19		20	139		86
Queue Length 95th (ft)		57	237			81	73		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		84	976			61	1954		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.35	0.26			0.66	0.18		0.09	0.34		0.38

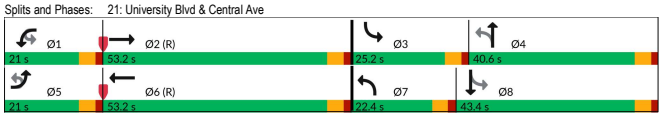
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	

Intersection Summary

Intersection Signal Delay (s/veh): 42.1		Intersection LOS: D	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Future Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93		0.95		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.610				0.564			0.950			
Satd. Flow (perm)	0	1081	1900	1538	0	1061	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							763	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	249	265	6	60	240	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	249	265	0	66	240	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.18	0.23		0.08	0.16		0.32		0.02	
Control Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			4.4				4.5			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	61	0		10	37		46		0	
Queue Length 95th (ft)		3	99	28		20	90		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		974	1351	1170		909	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.18	0.23		0.07	0.16		0.15		0.02	

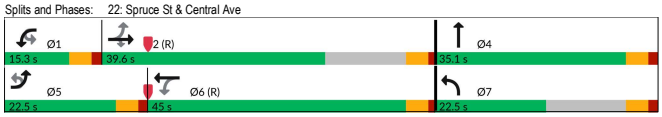
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary	

Intersection Signal Delay (s/veh): 7.4	Intersection LOS: A
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	297	57	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	297	57	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.976			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	1900	1615	1805	3507	0	1805	1853	0	1805	1734
Flt Permitted		0.499			0.557			0.693			0.711	
Satd. Flow (perm)	0	941	1900	1568	1054	3507	0	1314	1853	0	1349	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		28			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			412			375			421			261
Travel Time (s)			9.4			8.5			9.6			5.9
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	316	61	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	13.0%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		70.6	69.2	69.2	66.9	63.5		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.78	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.22	0.01	0.01	0.15		0.22	0.35		0.14	0.43
Control Delay (s/veh)		2.5	3.8	0.0	2.4	4.7		38.7	35.9		36.5	25.1
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.8	0.0	2.4	4.7		38.7	35.9		36.5	25.1
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			3.4			4.6			36.8			27.0
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	35	0	1	29		16	32		10	24
Queue Length 95th (ft)		18	106	0	3	54		41	69		30	68
Internal Link Dist (ft)			332			295			341			181
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		962	1523	1272	919	2589		373	533		382	529
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.22	0.01	0.01	0.15		0.08	0.13		0.05	0.19

Intersection Summary

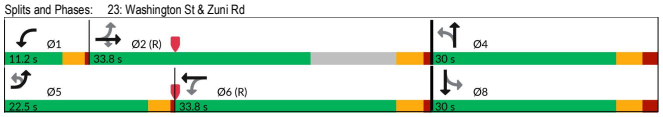
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 9.8	Intersection LOS: A
Intersection Capacity Utilization 43.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

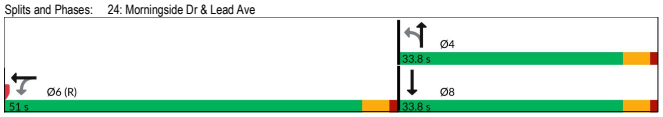


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	408	6	10	12	0	0	11	38
Future Volume (vph)	0	0	0	2	408	6	10	12	0	0	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.896	
Flt Protected								0.978				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1858	0	0	1667	0
Flt Permitted								0.921				
Satd. Flow (perm)	0	0	0	0	1896	0	0	1750	0	0	1667	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	2	434	6	11	13	0	0	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	442	0	0	24	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.43			0.04			0.09	
Control Delay (s/veh)					12.8			18.8			8.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.8			18.8			8.8	
LOS					B			B			A	
Approach Delay (s/veh)					12.8			18.8			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					129			8			4	
Queue Length 95th (ft)					197			25			27	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1040			604			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.43			0.04			0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 84.8	
Actuated Cycle Length: 84.8	
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 43.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 24: Morningside Dr & Lead Ave



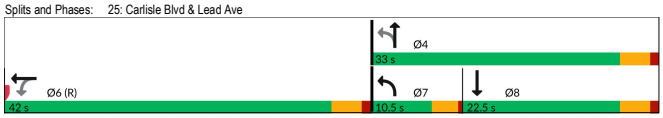
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	435	17	87	149	0	0	161	36
Future Volume (vph)	0	0	0	33	435	17	87	149	0	0	161	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.995						0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	1883	0	1805	1900	0	0	1852	0
Flt Permitted					0.997		0.342					
Satd. Flow (perm)	0	0	0	0	1883	0	650	1900	0	0	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	35	463	18	93	159	0	0	171	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	516	0	93	159	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.3		21.7	20.7			12.4	
Actuated g/C Ratio					0.60		0.29	0.28			0.17	
v/c Ratio					0.45		0.33	0.30			0.66	
Control Delay (s/veh)					11.2		12.4	14.9			36.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.2		12.4	14.9			36.8	
LOS					B		B	B			D	
Approach Delay (s/veh)					11.2			14.0			36.8	
Approach LOS					B			B			D	
Queue Length 50th (ft)					126		10	23			86	
Queue Length 95th (ft)					236		28	38			141	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1139		295	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.45		0.32	0.22			0.46	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B

Intersection Capacity Utilization 54.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Future Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.977						0.979				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1853	0	1805	1900	0
Flt Permitted		0.996								0.371		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1853	0	705	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	338	76	0	0	0	0	214	40	14	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	0	0	0	254	0	14	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

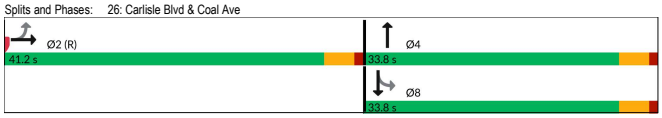
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3		14.3	14.3	
Actuated g/C Ratio		0.69						0.19		0.19	0.19	
v/c Ratio		0.36						0.70		0.10	0.53	
Control Delay (s/veh)		6.3						36.3		40.5	47.6	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		6.3						36.3		40.5	47.6	
LOS		A						D		D	D	
Approach Delay (s/veh)		6.3						36.3			47.1	
Approach LOS		A						D			D	
Queue Length 50th (ft)		68						105		7	96	
Queue Length 95th (ft)		147						161		m15	160	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1275						733		275	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.36						0.35		0.05	0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 23.8	Intersection LOS: C
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Future Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.890				
Flt Protected		0.999									0.986	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Flt Permitted		0.999									0.986	
Satd. Flow (perm)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			722			657			532	
Travel Time (s)		31.0			16.4			14.9			12.1	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	389	0	0	0	0	0	10	43	4	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	0	0	0	0	53	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

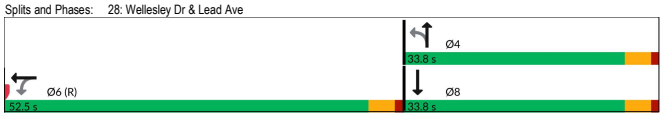
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	602	7	22	16	0	0	11	13
Future Volume (vph)	0	0	0	6	602	7	22	16	0	0	11	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.999						0.927	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	1897	0	0	1847	0	0	1730	0
Flt Permitted								0.885				
Satd. Flow (perm)	0	0	0	0	1897	0	0	1682	0	0	1730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	6	640	7	23	17	0	0	12	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	653	0	0	40	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.62			0.07			0.04	
Control Delay (s/veh)					16.2			19.8			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					16.2			19.8			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					16.2			19.8			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					223			15			4	
Queue Length 95th (ft)					332			36			21	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1055			571			596	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.62			0.07			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 16.2		Intersection LOS: B	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Future Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.999						0.946				
Flt Protected		0.999									0.976	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1782	0	0	1854	0
Flt Permitted		0.999									0.942	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1782	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	526	6	0	0	0	0	6	4	5	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	0	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	
v/c Ratio		0.52						0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		14.1						15.7			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		14.1						15.7			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		14.1						15.7			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		172						2			4	
Queue Length 95th (ft)		258						13			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1054						607			607	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.02			0.02	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.52
Intersection Signal Delay (s/veh): 14.3 Intersection LOS: B
Intersection Capacity Utilization 41.3% ICU Level of Service A
Analysis Period (min) 15

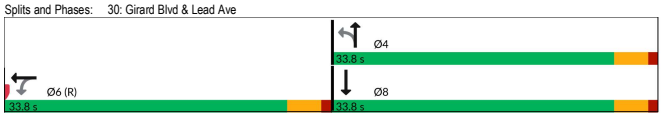
Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	554	31	45	132	0	0	96	50
Future Volume (vph)	0	0	0	26	554	31	45	132	0	0	96	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.993						0.954	
Flt Protected					0.998			0.987				
Satd. Flow (prot)	0	0	0	0	1881	0	0	1875	0	0	1799	0
Flt Permitted					0.998			0.874				
Satd. Flow (perm)	0	0	0	0	1881	0	0	1660	0	0	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	28	589	33	48	140	0	0	102	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	650	0	0	188	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.4			12.2			12.2	
Actuated g/C Ratio					0.69			0.18			0.18	
v/c Ratio					0.50			0.63			0.42	
Control Delay (s/veh)					7.4			34.5			19.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					7.4			34.5			19.6	
LOS					A			C			B	
Approach Delay (s/veh)					7.4			34.5			19.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)					102			73			39	
Queue Length 95th (ft)					221			121			79	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1292			719			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.50			0.26			0.19	

Intersection Summary
Area Type: Other
Cycle Length: 67.6
Actuated Cycle Length: 67.6
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay (s/veh): 14.5 Intersection LOS: B
Intersection Capacity Utilization 61.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 30: Girard Blvd & Lead Ave

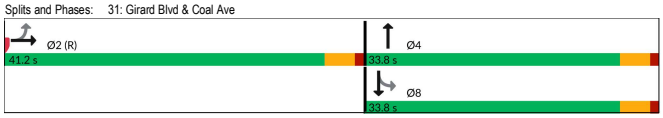


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Future Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993						0.977				
Flt Protected		0.996									0.992	
Satd. Flow (prot)	0	1877	0	0	0	0	0	1849	0	0	1885	0
Flt Permitted		0.996									0.929	
Satd. Flow (perm)	0	1877	0	0	0	0	0	1849	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	423	26	0	0	0	0	148	31	19	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	489	0	0	0	0	0	179	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		54.5						11.5			11.5	
Actuated g/C Ratio		0.73						0.15			0.15	
v/c Ratio		0.36						0.60			0.46	
Control Delay (s/veh)		16.2						35.0			33.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.2						35.0			33.7	
LOS		B						C			C	
Approach Delay (s/veh)		16.2						35.0			33.7	
Approach LOS		B						C			C	
Queue Length 50th (ft)		205						71			54	
Queue Length 95th (ft)		313						122			95	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1366						732			689	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.36						0.24			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



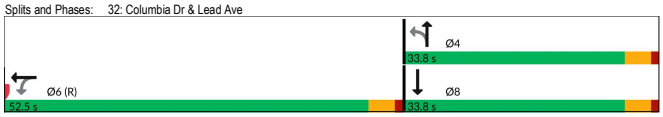
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	754	15	21	8	0	0	7	21
Future Volume (vph)	0	0	0	15	754	15	21	8	0	0	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.898	
Flt Protected					0.999			0.966				
Satd. Flow (prot)	0	0	0	0	1892	0	0	1835	0	0	1706	0
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	1892	0	0	1644	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	802	16	22	9	0	0	7	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	834	0	0	31	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.79			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					22.2			19.7			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					22.2			19.7			10.2	
LOS					C			B			B	
Approach Delay (s/veh)					22.2			19.7			10.2	
Approach LOS					C			B			B	
Queue Length 50th (ft)					335			11			3	
Queue Length 95th (ft)					503			30			20	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			558			593	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.79			0.06			0.05	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 21.7 Intersection LOS: C
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 32: Columbia Dr & Lead Ave



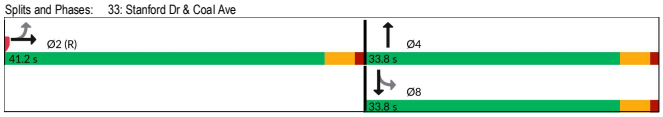
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Future Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.998						0.907				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	1892	0	0	0	0	0	1688	0	0	1849	0
Flt Permitted		0.998									0.939	
Satd. Flow (perm)	0	1892	0	0	0	0	0	1688	0	0	1782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						9				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	507	6	0	0	0	0	4	9	5	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	532	0	0	0	0	0	13	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.57						0.02			0.01	
Control Delay (s/veh)		16.7						9.7			14.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.7						9.7			14.1	
LOS		B						A			B	
Approach Delay (s/veh)		16.7						9.7			14.1	
Approach LOS		B						A			B	
Queue Length 50th (ft)		166						1			3	
Queue Length 95th (ft)		258						11			11	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		926						664			696	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.57						0.02			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.57
Intersection Signal Delay (s/veh): 16.5 Intersection LOS: B
Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave

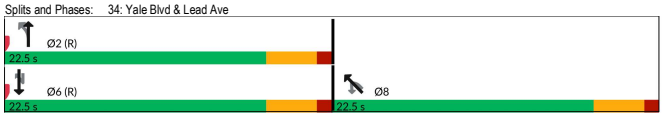


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	67	104	0	0	71	57	0	0	0	88	630	15
Future Volume (vph)	67	104	0	0	71	57	0	0	0	88	630	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.997	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1857	0
Flt Permitted	0.708									0.950		
Satd. Flow (perm)	1319	1863	0	0	1863	1583	0	0	0	1770	1857	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						61					3	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			111			172	
Travel Time (s)		23.2			29.0			2.5			3.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	71	111	0	0	76	61	0	0	0	94	670	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	111	0	0	76	61	0	0	0	94	686	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.13	0.15			0.10	0.09				0.13	0.92	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.3	5.2			9.0	3.5				9.2	35.4	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.3	5.2			9.0	3.5				9.2	35.4	
LOS	A	A			A	A				A	D	
Approach Delay (s/veh)		5.2			6.5						32.3	
Approach LOS		A			A						C	
Queue Length 50th (ft)	5	8			12	0				15	158	
Queue Length 95th (ft)	13	18			30	15				35	#343	
Internal Link Dist (ft)		772			1194				31		92	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	527	745			745	669				708	744	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.13	0.15			0.10	0.09				0.13	0.92	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.92
Intersection Signal Delay (s/veh): 24.6 Intersection LOS: C
Intersection Capacity Utilization 53.6% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 34: Yale Blvd & Lead Ave



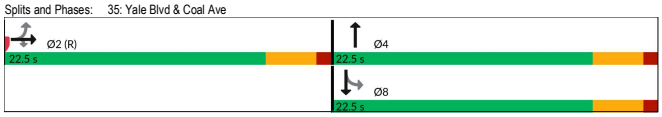
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Future Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98							1.00		
Frt			0.850					0.937				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1780	0	1805	1900	0
Flt Permitted	0.950									0.438		
Satd. Flow (perm)	1805	1900	1577	0	0	0	0	1780	0	831	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76					117				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	333	76	0	0	0	0	165	145	15	157	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	333	76	0	0	0	0	310	0	15	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	25.0	25.0	25.0					11.0		11.0	11.0	
Actuated g/C Ratio	0.56	0.56	0.56					0.24		0.24	0.24	
v/c Ratio	0.03	0.32	0.08					0.59		0.07	0.34	
Control Delay (s/veh)	6.1	7.4	2.5					13.5		14.5	17.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	6.1	7.4	2.5					13.5		14.5	17.2	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		6.5						13.5			17.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)	3	38	0					43		3	30	
Queue Length 95th (ft)	13	98	15					83		11	82	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	1002	1054	909					782		332	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.03	0.32	0.08					0.40		0.05	0.21	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 10.8	Intersection LOS: B
Intersection Capacity Utilization 53.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

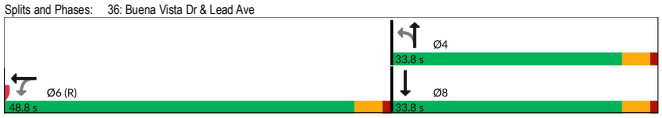


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Future Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.999						0.910	
Flt Protected					0.999			0.957				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1818	0	0	1729	0
Flt Permitted					0.999			0.826				
Satd. Flow (perm)	0	0	0	0	1896	0	0	1569	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)											12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7			3			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	17	850	4	32	4	0	0	6	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	871	0	0	36	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.86			0.06			0.03	
Control Delay (s/veh)					27.1			18.1			11.3	
Queue Delay					1.5			0.0			0.0	
Total Delay (s/veh)					28.6			18.1			11.3	
LOS					C			B			B	
Approach Delay (s/veh)					28.6			18.1			11.3	
Approach LOS					C			B			B	
Queue Length 50th (ft)					361			12			2	
Queue Length 95th (ft)					#617			32			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1016			556			621	
Starvation Cap Reductn					49			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.90			0.06			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 27.9		Intersection LOS: C	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

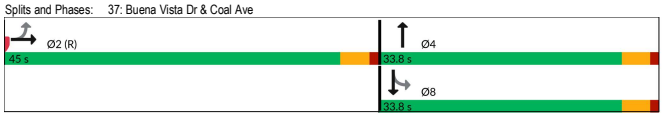


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Future Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.987						0.970				
Flt Protected		0.998									0.984	
Satd. Flow (prot)	0	1865	0	0	0	0	0	1833	0	0	1870	0
Flt Permitted		0.998									0.878	
Satd. Flow (perm)	0	1863	0	0	0	0	0	1833	0	0	1663	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	24	473	55	0	0	0	0	21	6	10	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	552	0	0	0	0	0	27	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		72.0						8.0			8.0	
Actuated g/C Ratio		0.91						0.10			0.10	
v/c Ratio		0.32						0.14			0.18	
Control Delay (s/veh)		2.0						29.1			35.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.0						29.1			35.2	
LOS		A						C			D	
Approach Delay (s/veh)		2.0						29.1			35.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						10			14	
Queue Length 95th (ft)		90						33			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1703						685			618	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.32						0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 4.8		Intersection LOS: A	
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Future Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850					0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	1894	1615	1805	5187	0	0	5057	0
Flt Permitted					0.997		0.481					
Satd. Flow (perm)	0	0	0	0	1894	1589	914	5187	0	0	5057	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						80					52	
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		48.6			22.7			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	53	722	113	34	216	0	0	272	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	775	113	34	216	0	0	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

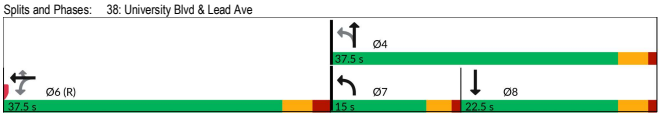
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6		6	4					
Detector Phase				6	6	6	7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0			8.0	
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%			30.0%	
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0			18.0	
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5			3.5	
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)					5.5	5.5	4.0	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	Max			Max	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				23.0	23.0	23.0		10.0			10.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)					32.0	32.0	33.5	33.0			29.1	
Actuated g/C Ratio					0.43	0.43	0.45	0.44			0.39	
v/c Ratio					0.96	0.16	0.07	0.09			0.16	
Control Delay (s/veh)					46.3	5.9	12.2	12.4			13.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)					46.3	5.9	12.2	12.4			13.8	
LOS					D	A	B	B			B	
Approach Delay (s/veh)					41.2			12.4			13.8	
Approach LOS					D			B			B	
Queue Length 50th (ft)					337	9	9	20			26	
Queue Length 95th (ft)					#571	37	23	33			54	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					808	723	538	2282			1996	
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.96	0.16	0.06	0.09			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			

Intersection Signal Delay (s/veh): 30.2	Intersection LOS: C
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Future Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.97	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.564		
Satd. Flow (perm)	0	0	0	1802	1900	1615	0	5187	1567	1070	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						69			124			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

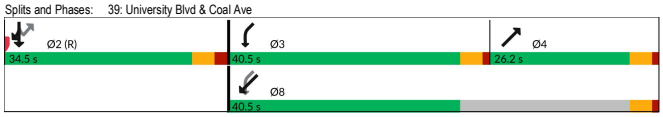
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		3.0	8.0	
Minimum Split (s)				44.5	44.5	44.5		26.5		26.5	40.5	
Total Split (s)				34.5	34.5	34.5		26.2		40.5	40.5	
Total Split (%)				34.1%	34.1%	34.1%		25.9%		40.0%	40.0%	
Maximum Green (s)				29.0	29.0	29.0		21.7		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				2.0	2.0	2.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				5.5	5.5	5.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		1.5	2.0	
Recall Mode				C-Max	C-Max	C-Max		None		None	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		0.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		10.0		0.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				29.0	29.0	29.0		54.2	101.2	62.2	62.2	
Actuated g/C Ratio				0.29	0.29	0.29		0.54	1.00	0.61	0.61	
v/c Ratio				0.08	0.84	0.21		0.08	0.05	0.08	0.08	
Control Delay (s/veh)				27.0	49.8	13.0		12.1	0.1	8.1	8.0	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				27.0	49.8	13.0		12.1	0.1	8.1	8.0	
LOS				C	D	B		B	A	A	A	
Approach Delay (s/veh)					41.7			9.1			8.0	
Approach LOS					D			A			A	
Queue Length 50th (ft)				19	278	19		24	0	13	23	
Queue Length 95th (ft)				46	#445	60		38	0	27	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				516	544	512		2779	1567	919	3188	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.08	0.84	0.21		0.08	0.05	0.06	0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	

Intersection Signal Delay (s/veh): 25.2	Intersection LOS: C
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave



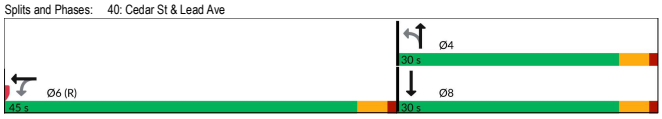
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Future Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.994						0.880	
Flt Protected					0.999			0.997				
Satd. Flow (prot)	0	0	0	0	1884	0	0	1894	0	0	1636	0
Flt Permitted					0.999			0.981				
Satd. Flow (perm)	0	0	0	0	1884	0	0	1864	0	0	1636	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	830	41	10	179	0	0	15	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	889	0	0	189	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.8			12.2			12.2	
Actuated g/C Ratio					0.72			0.16			0.16	
v/c Ratio					0.66			0.63			0.37	
Control Delay (s/veh)					13.7			38.1			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.7			38.1			9.9	
LOS					B			D			A	
Approach Delay (s/veh)					13.7			38.1			9.9	
Approach LOS					B			D			A	
Queue Length 50th (ft)					248			83			6	
Queue Length 95th (ft)					m290			135			47	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1353			633			634	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.66			0.30			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 17.1		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave

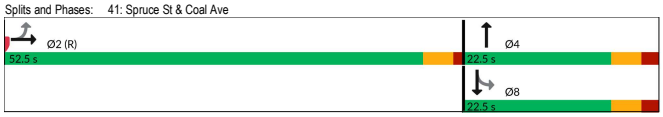


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Future Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.946				
Flt Protected		0.998									0.980	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1780	0	0	1862	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	1894	0	0	0	0	0	1780	0	0	1897	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	663	3	0	0	0	0	3	2	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	694	0	0	0	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.38						0.03			0.06	
Control Delay (s/veh)		1.8						26.2			31.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.8						26.2			31.0	
LOS		A						C			C	
Approach Delay (s/veh)		1.8						26.2			31.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			5	
Queue Length 95th (ft)		142						11			20	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1803						405			429	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.38						0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 2.4		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



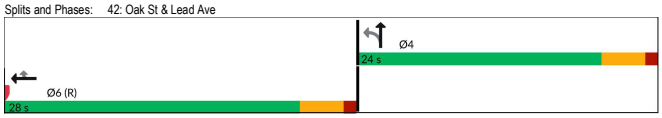
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Future Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						122	105					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					28.8	28.8	14.2	14.2				
Actuated g/C Ratio					0.55	0.55	0.27	0.27				
v/c Ratio					0.44	0.56	0.18	0.63				
Control Delay (s/veh)					9.6	9.4	4.1	19.1				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					9.6	9.4	4.1	19.1				
LOS					A	A	A	B				
Approach Delay (s/veh)					9.5			16.9				
Approach LOS					A			B				
Queue Length 50th (ft)					73	63	0	87				
Queue Length 95th (ft)					163	173	23	112				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1052	933	742	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.44	0.56	0.14	0.46				

Intersection Summary			
Area Type:	Other		
Cycle Length: 52			
Actuated Cycle Length: 52			
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Future Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								0.99				
Frt								0.958				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4940	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	317							51				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	433	911	0	0	0	0	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	433	911	0	0	0	0	0	418	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	24.9	24.9						10.1				
Actuated g/C Ratio	0.55	0.55						0.22				
v/c Ratio	0.38	0.87						0.36				
Control Delay (s/veh)	2.8	21.1						13.8				
Queue Delay	0.0	8.1						0.0				
Total Delay (s/veh)	2.8	29.2						13.8				
LOS	A	C						B				
Approach Delay (s/veh)		20.7						13.8				
Approach LOS		C						B				
Queue Length 50th (ft)	12	170						29				
Queue Length 95th (ft)	44	#403						48				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1138	1049						1897				
Starvation Cap Reductn	0	115						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.38	0.98						0.22				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	

Intersection Signal Delay (s/veh): 19.1	Intersection LOS: B
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 43: Oak St & Coal Ave

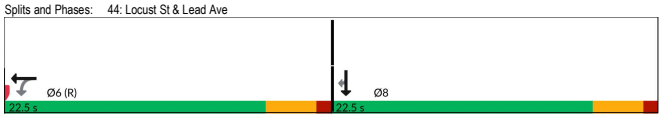
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Future Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.972	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	1900	0	0	0	0	0	3361	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	1900	0	0	0	0	0	3361	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				74							68	237
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	74	468	0	0	0	0	0	576	441
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	0	0	74	468	0	0	0	0	0	708	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				20.2	20.2						15.8	15.8
Actuated g/C Ratio				0.45	0.45						0.35	0.35
v/c Ratio				0.09	0.55						0.58	0.46
Control Delay (s/veh)				3.2	13.1						12.3	5.5
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				3.2	13.1						12.3	5.5
LOS				A	B						B	A
Approach Delay (s/veh)					11.7						10.2	
Approach LOS					B						B	
Queue Length 50th (ft)				0	90						64	12
Queue Length 95th (ft)				17	165						102	53
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				850	852						1385	730
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.55						0.51	0.42

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay (s/veh): 10.7	Intersection LOS: B

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Future Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98							1.00	1.00	
Frt			0.850									
Flt Protected										0.950	0.963	
Satd. Flow (prot)	0	1900	1583	0	0	0	0	0	0	1643	3330	0
Flt Permitted										0.950	0.963	
Satd. Flow (perm)	0	1900	1557	0	0	0	0	0	0	1640	3326	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			50							110	110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	756	63	0	0	0	0	0	0	591	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	756	63	0	0	0	0	0	0	295	390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

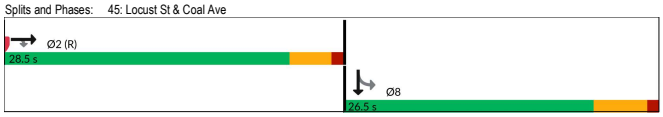
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		31.7	31.7							13.3	13.3	
Actuated g/C Ratio		0.58	0.58							0.24	0.24	
v/c Ratio		0.69	0.07							0.61	0.44	
Control Delay (s/veh)		15.0	3.6							16.5	13.3	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		15.0	3.6							16.5	13.3	
LOS		B	A							B	B	
Approach Delay (s/veh)		14.2									14.7	
Approach LOS		B									B	
Queue Length 50th (ft)		139	1							59	43	
Queue Length 95th (ft)		#404	18							107	62	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1093	917							694	1337	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.69	0.07							0.43	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 55	
Actuated Cycle Length: 55	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	

Intersection Signal Delay (s/veh): 14.4	Intersection LOS: B
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 45: Locust St & Coal Ave



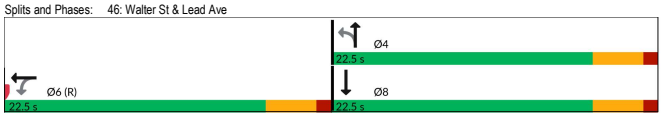
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Future Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.923	
Flt Protected					0.999			0.964				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1832	0	0	1731	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1896	0	0	1900	0	0	1731	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2				2		2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	22	932	6	14	5	0	0	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	960	0	0	19	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases					6			4				
Detector Phase					6	6		4	4			8
Switch Phase												
Minimum Initial (s)					8.0	8.0		8.0	8.0			8.0
Minimum Split (s)					22.5	22.5		22.5	22.5			22.5
Total Split (s)					22.5	22.5		22.5	22.5			22.5
Total Split (%)					50.0%	50.0%		50.0%	50.0%			50.0%
Maximum Green (s)					18.0	18.0		18.0	18.0			18.0
Yellow Time (s)					3.5	3.5		3.5	3.5			3.5
All-Red Time (s)					1.0	1.0		1.0	1.0			1.0
Lost Time Adjust (s)						0.0			0.0			0.0
Total Lost Time (s)						4.5			4.5			4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0		2.0	2.0			2.0
Recall Mode					C-Max	C-Max		None	None			None
Walk Time (s)					7.0	7.0		7.0	7.0			7.0
Flash Don't Walk (s)					10.0	10.0		10.0	10.0			10.0
Pedestrian Calls (#/hr)					0	0		0	0			0
Act Effct Green (s)						41.6			8.0			8.0
Actuated g/C Ratio						0.92			0.18			0.18
v/c Ratio						0.55			0.06			0.02
Control Delay (s/veh)						5.2			19.4			12.6
Queue Delay						0.0			0.0			0.0
Total Delay (s/veh)						5.2			19.4			12.6
LOS						A			B			B
Approach Delay (s/veh)						5.2			19.4			12.6
Approach LOS						A			B			B
Queue Length 50th (ft)						7			4			1
Queue Length 95th (ft)						#410			m17			8
Internal Link Dist (ft)		1027				1009			282			139
Turn Bay Length (ft)												
Base Capacity (vph)						1753			760			694
Starvation Cap Reductn						0			0			0
Spillback Cap Reductn						0			0			0
Storage Cap Reductn						0			0			0
Reduced v/c Ratio						0.55			0.03			0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



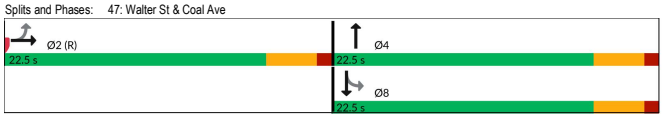
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Future Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.890				
Flt Protected											0.985	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1658	0	0	1872	0
Flt Permitted												
Satd. Flow (perm)	0	1898	0	0	0	0	0	1658	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						27				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		827			715			226			362	
Travel Time (s)		18.8			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	651	4	0	0	0	0	6	27	4	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	0	0	0	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.37						0.10			0.04	
Control Delay (s/veh)		2.5						9.5			15.8	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.5						9.5			15.8	
LOS		A						A			B	
Approach Delay (s/veh)		2.5						9.5			15.8	
Approach LOS		A						A			B	
Queue Length 50th (ft)		0						1			4	
Queue Length 95th (ft)		140						18			m6	
Internal Link Dist (ft)		747			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1755						679			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.37						0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 3.0		Intersection LOS: A	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Future Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1881	1615	0	1805	3610	0	0	3574
Flt Permitted				0.950				0.480				
Satd. Flow (perm)	0	0	0	1801	1881	1583	0	912	3610	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						60						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	0	0	43	769	129	2	69	526	0	0	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	43	769	129	0	71	526	0	0	350
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	79
Future Volume (vph)	79
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1588
Right Turn on Red	Yes
Satd. Flow (RTOR)	84
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	84
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (%)				35.0%	35.0%	35.0%	29.0%	29.0%	36.0%			36.0%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	35.1			35.1
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		39.2	35.1			35.1
Actuated g/C Ratio				0.53	0.53	0.53		0.36	0.32			0.32
v/c Ratio				0.04	0.77	0.15		0.20	0.46			0.31
Control Delay (s/veh)				13.5	27.6	8.1		5.9	11.1			29.2
Queue Delay				0.0	0.0	0.0		0.0	0.1			0.0
Total Delay (s/veh)				13.5	27.6	8.1		5.9	11.3			29.2
LOS				B	C	A		A	B			C
Approach Delay (s/veh)					24.3				10.6			24.8
Approach LOS					C				B			C
Queue Length 50th (ft)				15	426	24		7	43			97
Queue Length 95th (ft)				33	602	55		13	55			137
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				956	999	869		740	1151			1140
Starvation Cap Reductn				0	0	0		0	109			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.04	0.77	0.15		0.10	0.50			0.31

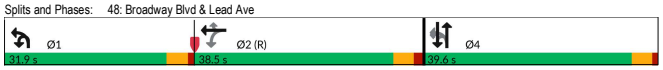
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.15
Control Delay (s/veh)	6.5
Queue Delay	0.0
Total Delay (s/veh)	6.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	35
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	563
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Future Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		200	0		0	0		130	100		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.97						0.99			
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	1787	3610	0
Flt Permitted	0.950									0.359		
Satd. Flow (perm)	1790	3610	1573	0	0	0	0	3610	1595	675	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64						69			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		475			277			421			359	
Travel Time (s)		10.8			6.3			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		2						4		1	4	
Permitted Phases	2		2						4	4		
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	39.0%	
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	37.9	
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	7.0	
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9	61.4	37.9	
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34	0.56	0.34	
v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	
Control Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
LOS	C	C	A					C	A	A	A	
Approach Delay (s/veh)		29.6						26.4			6.9	
Approach LOS		C						C			A	
Queue Length 50th (ft)	34	159	0					148	0	4	20	
Queue Length 95th (ft)	69	211	30					198	30	16	28	
Internal Link Dist (ft)		395			197			341			279	
Turn Bay Length (ft)	100		200						130	100		
Base Capacity (vph)	554	1119	531					1243	594	609	1243	
Starvation Cap Reductn	0	0	0					0	0	0	0	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	43	244
Future Volume (vph)	24	34	1	363	9	43	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.993
Satd. Flow (prot)	1715	0	0	1894	0	0	1887
Flt Permitted	0.979						0.993
Satd. Flow (perm)	1715	0	0	1894	0	0	1887
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	46	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	306
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.971			0.996			0.995	
Flt Protected		0.993			0.989			0.997			0.998	
Satd. Flow (prot)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.993			0.989			0.997			0.998	
Satd. Flow (perm)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	43	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.972			0.975			0.998			0.998	
Flt Protected		0.994			0.978		0.950			0.950		
Satd. Flow (prot)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.994			0.978		0.950			0.950		
Satd. Flow (perm)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2				2		2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	43	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	7	12	11	7	1
Future Volume (vph)	35	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.983	
Flt Protected	0.960			0.975		
Satd. Flow (prot)	1786	0	0	1852	1868	0
Flt Permitted	0.960			0.975		
Satd. Flow (perm)	1786	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	37	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

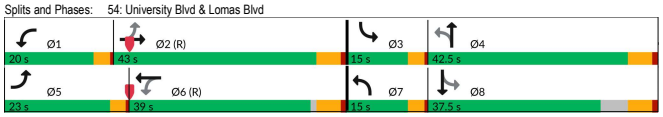
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

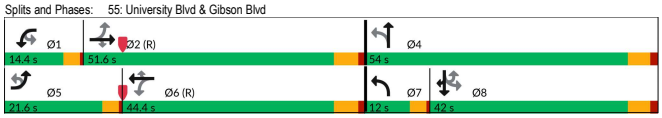
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 20.3		Intersection LOS: C	

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	234	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	234	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.990			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3569	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3569	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	249	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	267	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.21		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	26.7		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	26.7		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.3			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	73		17	161			16
Queue Length 95th (ft)		#219	161	0	33	105		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1273		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.21		0.11	0.54			0.12

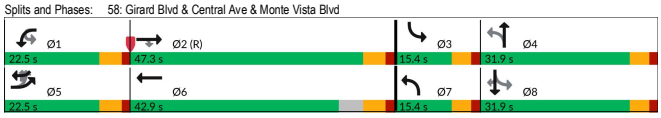
Intersection Summary
Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

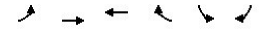
Intersection Signal Delay (s/veh): 53.6 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



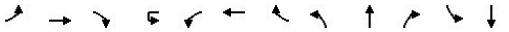
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 43.9% ICU Level of Service A
Analysis Period (min) 15



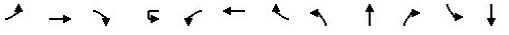
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	900	0	0	0
Future Volume (vph)	0	0	900	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	957	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	957	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.7%	ICU Level of Service A	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	



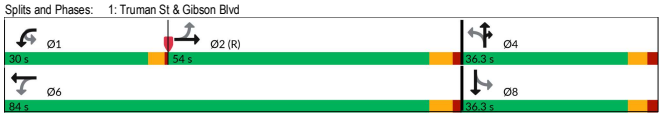
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

Intersection Summary	
Area Type:	Other
Cycle Length: 120.3	
Actuated Cycle Length: 120.3	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

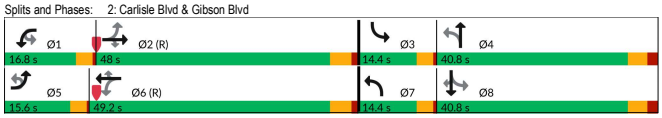
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary

Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



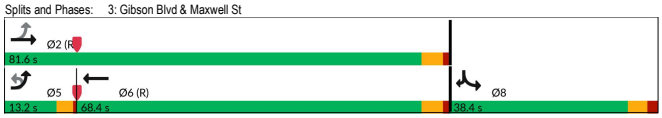
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay (s/veh): 3.3	Intersection LOS: A

Intersection Capacity Utilization 36.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

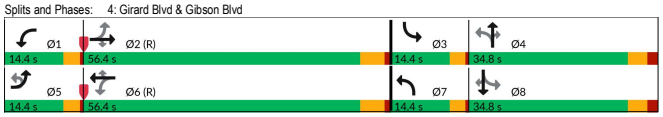
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123.3	
Actuated Cycle Length: 123.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	

Intersection Summary	

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

Intersection Summary

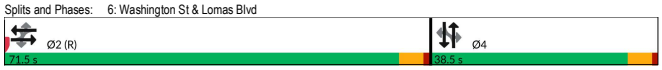
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



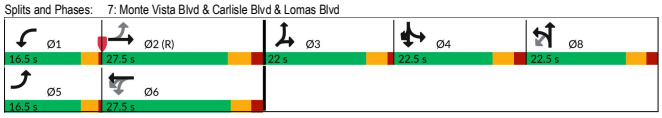
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	
Intersection Summary							

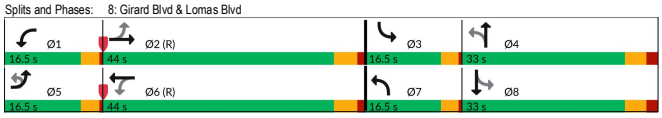
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

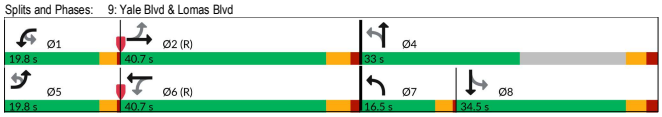
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09
Intersection Summary		

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



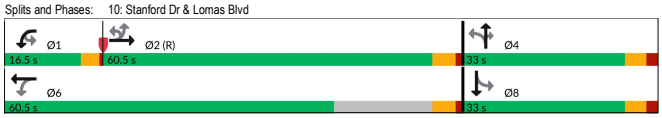
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	
Intersection Summary		

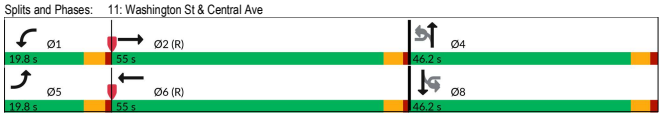
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	67	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	67	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.374			0.357
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	707	1851	0	669
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			698		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	68	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	68	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.9			15.9	75.5		18.2	18.2		18.2
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.36		0.65	0.71		0.22
Control Delay (s/veh)		77.1	15.1			79.8	15.1		74.2	60.0		48.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.1			79.8	15.1		74.2	60.0		48.2
LOS		E	B			E	B		E	E		D
Approach Delay (s/veh)			20.3				20.6			63.6		
Approach LOS			C				C			E		
Queue Length 50th (ft)		27	146			30	160		51	145		15
Queue Length 95th (ft)		61	281			66	309		98	214		40
Internal Link Dist (ft)			1288				848			618		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1165			78	1176		240	635		227
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.36		0.28	0.32		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 121			
Actuated Cycle Length: 121			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 34.7		Intersection LOS: C	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.2	
Actuated g/C Ratio	0.15	
v/c Ratio	0.69	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	57.4	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	207	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	480	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	480	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.998			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1896	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	701	1888	0	0	1347	1896	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	490	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	495	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

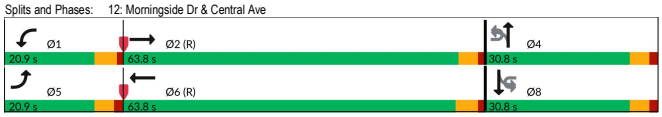
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.35			0.32		
Control Delay (s/veh)		57.4	5.8			49.1	9.3			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.4	5.8			49.1	9.3			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.5			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	144			22		
Queue Length 95th (ft)		52	191			32	283			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1418			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.35			0.11		

Intersection Summary

Area Type: Other
Cycle Length: 115.5
Actuated Cycle Length: 115.5
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 44.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	444	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	444	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.149				0.305			0.395			0.409
Satd. Flow (perm)	0	277	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	453	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	453	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.8	55.9	55.9		14.6	41.2	41.2	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.35	0.35	0.05		0.67	0.64	0.07	0.18	0.62		0.23
Control Delay (s/veh)		262.5	22.7	0.1		84.2	34.8	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		262.5	22.7	0.1		84.2	34.8	0.2	28.8	49.4		30.0
LOS		F	C	A		F	C	A	C	D		C
Approach Delay (s/veh)			66.6				36.3			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	273	0	22	122		31
Queue Length 95th (ft)		#203	278	0		#84	390	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		66	955	825		79	703	650	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.35	0.35	0.05		0.63	0.64	0.07	0.16	0.35		0.22

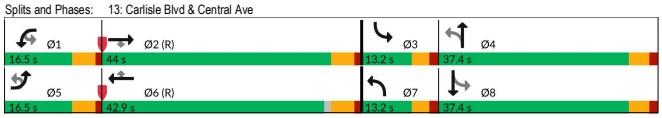
Intersection Summary
Area Type: Other
Cycle Length: 111.1
Actuated Cycle Length: 111.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay (s/veh): 48.6 Intersection LOS: D
Intersection Capacity Utilization 63.0% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	509	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	509	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.994			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1876	0	0	1749	0	0
Flt Permitted		0.656				0.588				0.912		
Satd. Flow (perm)	0	1220	1877	0	0	1022	1876	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	519	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	539	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.35			0.26		
Control Delay (s/veh)		53.5	3.8			49.5	6.2			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.5	3.8			49.5	6.2			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				8.0			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	63			16		
Queue Length 95th (ft)		41	96			39	270			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		167	1548			143	1558			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.35			0.09		

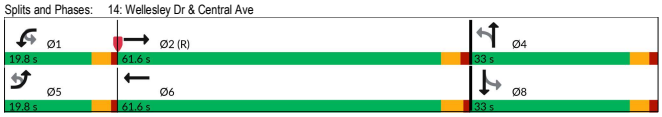
Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	448	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	448	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1876	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1177	1879	0	0	853	1876	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	457	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	464	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

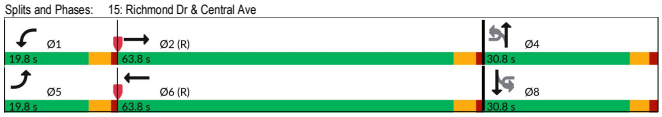
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.31			0.41		
Control Delay (s/veh)		49.1	7.8			64.4	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.1	7.8			64.4	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				6.7			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			19	39			23		
Queue Length 95th (ft)		36	253			52	75			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1501			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.31			0.14		

Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.4	Intersection LOS: B
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	613	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	613	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.995			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3581	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3581	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				3			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	626	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	646	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.31			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	15.1			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	15.1			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.8			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	124			16		
Queue Length 95th (ft)		#99	81			73	213			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2067			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.31			0.10		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

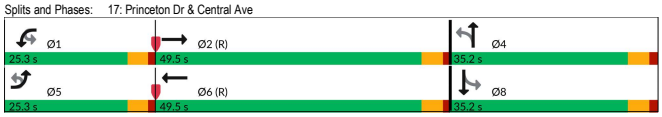
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	

Intersection Summary

Intersection Signal Delay (s/veh): 20.1		Intersection LOS: C	
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	611	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	611	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	623	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	628	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.22			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.3	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.3	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.4			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	33			10		5
Queue Length 95th (ft)		43	154			m68	45			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.22			0.08		0.02

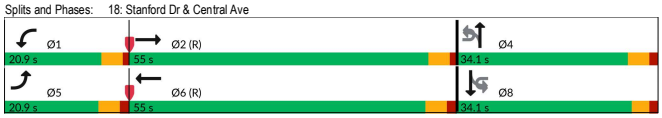
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	
Intersection Summary		

Intersection Signal Delay (s/veh): 9.8	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



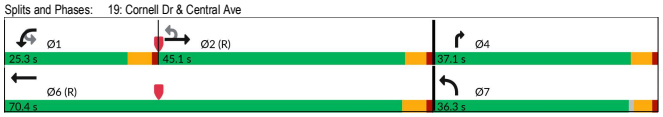
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	584	55	49
Future Volume (vph)	1	587	131	4	59	584	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	596	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	596	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.19	0.38	0.28
Control Delay (s/veh)		17.1			123.8	1.9	53.2	16.8
Queue Delay		0.0			0.0	0.3	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.2	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				14.0	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	30	37	0
Queue Length 95th (ft)		250			#113	51	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1839	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.47	0.10	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 107.5	
Actuated Cycle Length: 107.5	
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	

Intersection Signal Delay (s/veh): 17.1		Intersection LOS: B	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	96	13	124	498	9	118	23	87	12
Future Volume (vph)	4	11	582	96	13	124	498	9	118	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.98				1.00		0.99		0.97	0.99
Frt			0.979				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3468	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.076			0.405			0.742
Satd. Flow (perm)	0	1466	3468	0	0	144	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			15				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1282		
Travel Time (s)			32.1				17.0			35.0		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	98	13	127	508	9	120	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	692	0	0	140	517	0	120	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			52.3	101.5		21.7	16.8	16.8	11.3
Actuated g/C Ratio		0.06	0.36			0.37	0.73		0.16	0.12	0.12	0.08
v/c Ratio		0.16	0.54			2.64	0.20		0.55	0.10	0.29	0.09
Control Delay (s/veh)		55.1	39.0			801.1	8.6		60.8	54.3	4.6	47.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.1	39.0			801.1	8.6		60.8	54.3	4.6	47.3
LOS		E	D			F	A		E	D	A	D
Approach Delay (s/veh)			39.4				177.5			38.6		
Approach LOS			D				F			D		
Queue Length 50th (ft)		12	216			~220	70		95	17	0	9
Queue Length 95th (ft)		m17	m303			#328	148		153	47	16	27
Internal Link Dist (ft)			1332				670			1202		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1272			53	2603		248	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.54			2.64	0.20		0.48	0.05	0.18	0.07

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.64	

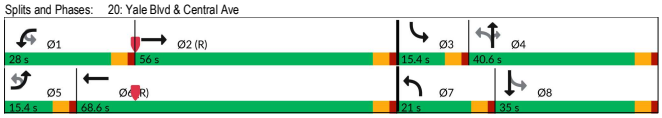
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.1	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	

Intersection Summary	

Intersection Signal Delay (s/veh): 95.2	Intersection LOS: F
Intersection Capacity Utilization 57.8%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Future Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.97	0.98			0.94	0.99	
Frt			0.993				0.946				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1885	0	0	1805	3358	0	0	1805	4971	0
Flt Permitted		0.116				0.108				0.503		
Satd. Flow (perm)	0	220	1885	0	0	200	3358	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				86				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	389	18	20	47	383	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	407	0	0	67	600	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	48.9			36.9	51.3			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.62			1.29	0.47			0.18	0.66	
Control Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.0				51.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	301			~80	205			23	104	
Queue Length 95th (ft)		#175	424			#190	126			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	660			52	1285			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.62			1.29	0.47			0.11	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29

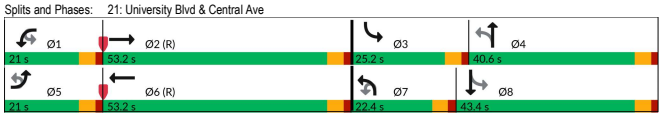
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 56.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Future Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.503				0.459			0.950			
Satd. Flow (perm)	0	956	1900	1563	0	872	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							712	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	388	171	11	70	432	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	388	171	0	81	432	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

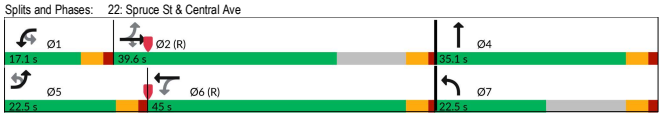
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.40		0.05	
Control Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			6.7				5.7			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	105	0		12	76		67		0	
Queue Length 95th (ft)		3	162	23		23	171		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		858	1251	1088		761	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.21		0.05	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 9.2	Intersection LOS: A
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	473	25	1	19	361	87	35	54	9	60
Future Volume (vph)	5	109	473	25	1	19	361	87	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300		100		0	100		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		1.00	0.99		1.00	1.00		1.00
Frt				0.850			0.971			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1803	1900	1615	0	1803	3486	0	1805	1853	0	1805
Flt Permitted		0.463				0.473			0.484			0.715
Satd. Flow (perm)	0	876	1900	1566	0	896	3486	0	918	1853	0	1357
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				76			37			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			380				354			333		
Travel Time (s)			8.6				8.0			7.6		
Confl. Peds. (#/hr)		3		3		3		3	3		3	1
Confl. Bikes (#/hr)				4				1			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	483	26	1	19	368	89	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	483	26	0	20	457	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1698	0
Flt Permitted		
Satd. Flow (perm)	1698	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	103	
Link Speed (mph)	30	
Link Distance (ft)	362	
Travel Time (s)	8.2	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	22.0	33.8		30.0	30.0		30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.5	22.5	33.8		30.0	30.0		30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	26.1%	26.1%	39.2%		34.8%	34.8%		34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	19.0	19.0	29.3		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		3.5	4.5		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	1.5	4.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		None
Walk Time (s)			7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0	11.0	11.0	10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0	0	0	0		0	0		0
Act Effct Green (s)		66.5	62.7	62.7		62.6	58.2		10.4	10.4		10.4
Actuated g/C Ratio		0.77	0.73	0.73		0.73	0.67		0.12	0.12		0.12
v/c Ratio		0.16	0.35	0.02		0.03	0.19		0.33	0.28		0.38
Control Delay (s/veh)		3.2	6.3	0.0		3.1	5.9		41.7	32.7		40.7
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.2	6.3	0.0		3.1	5.9		41.7	32.7		40.7
LOS		A	A	A		A	A		D	C		D
Approach Delay (s/veh)			5.5				5.8			35.9		
Approach LOS			A				A			D		
Queue Length 50th (ft)		11	60	0		2	38		19	28		32
Queue Length 95th (ft)		29	184	0		8	76		45	61		65
Internal Link Dist (ft)			300				274			253		
Turn Bay Length (ft)		300		300		100			100			100
Base Capacity (vph)		883	1380	1158		894	2362		260	532		385
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.13	0.35	0.02		0.02	0.19		0.14	0.12		0.16

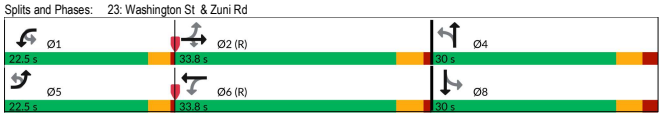
Intersection Summary	
Area Type:	Other
Cycle Length: 86.3	
Actuated Cycle Length: 86.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	34.8%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.4	
Actuated g/C Ratio	0.12	
v/c Ratio	0.59	
Control Delay (s/veh)	24.0	
Queue Delay	0.0	
Total Delay (s/veh)	24.0	
LOS	C	
Approach Delay (s/veh)	28.4	
Approach LOS	C	
Queue Length 50th (ft)	37	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	282	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Intersection Signal Delay (s/veh): 11.4	Intersection LOS: B
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

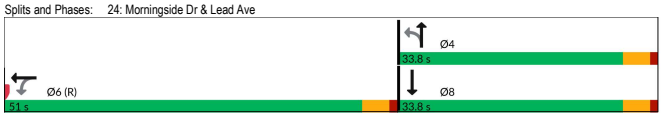


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	498	12	13	15	0	0	15	34
Future Volume (vph)	0	0	0	8	498	12	13	15	0	0	15	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.997						0.905	
Flt Protected					0.999			0.977				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1856	0	0	1678	0
Flt Permitted					0.999			0.915				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1738	0	0	1678	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	508	12	13	15	0	0	15	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	528	0	0	28	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.51			0.05			0.08	
Control Delay (s/veh)					14.1			18.9			9.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					14.1			18.9			9.6	
LOS					B			B			A	
Approach Delay (s/veh)					14.1			18.9			9.6	
Approach LOS					B			B			A	
Queue Length 50th (ft)					164			10			5	
Queue Length 95th (ft)					247			28			28	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1037			600			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.51			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 14.0		Intersection LOS: B	
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	51	482	40	65	173	0	0	150	55
Future Volume (vph)	0	0	0	51	482	40	65	173	0	0	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											0.99	
Frt					0.991						0.964	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1875	0	1805	1900	0	0	1820	0
Flt Permitted					0.996		0.340					
Satd. Flow (perm)	0	0	0	0	1875	0	646	1900	0	0	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	52	492	41	66	177	0	0	153	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	585	0	66	177	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

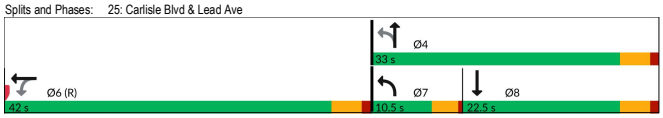
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.7		21.3	20.3			12.3	
Actuated g/C Ratio					0.61		0.28	0.27			0.16	
v/c Ratio					0.51		0.24	0.35			0.66	
Control Delay (s/veh)					11.9		10.3	16.3			35.6	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.9		10.3	16.3			35.6	
LOS					B		B	B			D	
Approach Delay (s/veh)					11.9			14.7			35.6	
Approach LOS					B			B			D	
Queue Length 50th (ft)					145		9	31			82	
Queue Length 95th (ft)					279		m17	41			137	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1146		291	722			454	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.51		0.23	0.25			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			

Intersection Signal Delay (s/veh): 17.3		Intersection LOS: B	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



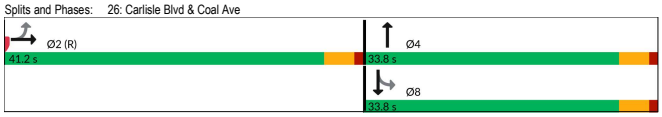
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Future Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.983						0.974				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1855	0	0	0	0	0	1843	0	1805	1900	0
Flt Permitted		0.996								0.385		
Satd. Flow (perm)	0	1855	0	0	0	0	0	1843	0	732	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	45	486	76	0	0	0	0	196	47	26	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	607	0	0	0	0	0	243	0	26	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.2						13.8		13.8	13.8	
Actuated g/C Ratio		0.70						0.18		0.18	0.18	
v/c Ratio		0.47						0.69		0.19	0.52	
Control Delay (s/veh)		7.3						36.0		40.0	44.4	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		7.3						36.0		40.0	44.4	
LOS		A						D		D	D	
Approach Delay (s/veh)		7.3						36.0			43.8	
Approach LOS		A						D			D	
Queue Length 50th (ft)		102						98		13	89	
Queue Length 95th (ft)		216						155		m27	151	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1296						731		285	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.47						0.33		0.09	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 21.0		Intersection LOS: C	

Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Future Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.894				
Flt Protected		0.999									0.988	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			737			657			532	
Travel Time (s)		31.0			16.8			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	595	8	0	0	0	0	17	63	5	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	80	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

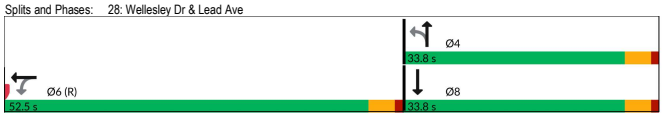
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	590	16	16	9	0	0	10	27
Future Volume (vph)	0	0	0	8	590	16	16	9	0	0	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.997						0.901	
Flt Protected					0.999			0.969				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1841	0	0	1712	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1679	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	602	16	16	9	0	0	10	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	626	0	0	25	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.60			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					15.6			19.5			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					15.6			19.5			9.9	
LOS					B			B			A	
Approach Delay (s/veh)					15.6			19.5			9.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					209			9			4	
Queue Length 95th (ft)					312			26			24	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1052			570			599	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.60			0.04			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.60
Intersection Signal Delay (s/veh): 15.4 Intersection LOS: B
Intersection Capacity Utilization 54.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: Wellesley Dr & Lead Ave



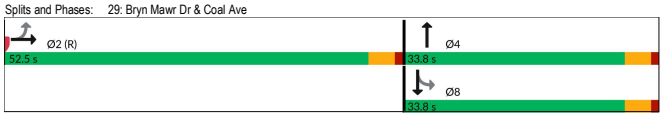
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Future Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.97			1.00	
Frt		0.999						0.884				
Flt Protected		0.999									0.982	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1624	0	0	1866	0
Flt Permitted		0.999									0.961	
Satd. Flow (perm)	0	1895	0	0	0	0	0	1624	0	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	610	3	0	0	0	0	1	6	3	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	628	0	0	0	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.60						0.01			0.01	
Control Delay (s/veh)		15.7						12.4			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		15.7						12.4			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		15.7						12.4			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		211						0			3	
Queue Length 95th (ft)		314						9			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						555			618	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.60						0.01			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.60
Intersection Signal Delay (s/veh): 15.7 Intersection LOS: B
Intersection Capacity Utilization 60.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



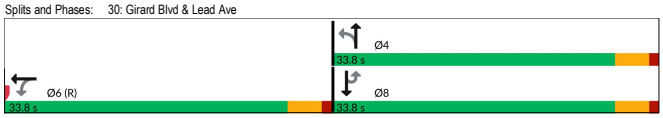
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	632	30	42	190	0	1	0	155
Future Volume (vph)	0	0	0	40	632	30	42	190	0	1	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt					0.994							0.952
Flt Protected					0.997			0.991				
Satd. Flow (prot)	0	0	0	0	1881	0	0	1883	0	0	0	1793
Flt Permitted					0.997			0.833				0.999
Satd. Flow (perm)	0	0	0	0	1881	0	0	1582	0	0	0	1791
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					4							52
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		25.8			33.6			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	645	31	43	194	0	1	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	717	0	0	237	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2		1	2		1		2
Detector Template				Left	Thru		Left	Thru		Left		Thru
Leading Detector (ft)				20	100		20	100		20		100
Trailing Detector (ft)				0	0		0	0		0		0
Detector 1 Position(ft)				0	0		0	0		0		0
Detector 1 Size(ft)				20	6		20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	88
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases				6			4			8		
Detector Phase				6	6		4	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0		8.0		8.0
Minimum Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (%)				50.0%	50.0%		50.0%	50.0%		50.0%		50.0%
Maximum Green (s)				29.3	29.3		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode				C-Max	C-Max		None	None		None		None
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					44.8			13.8				13.8
Actuated g/C Ratio					0.66			0.20				0.20
v/c Ratio					0.57			0.73				0.61
Control Delay (s/veh)					9.6			38.1				24.8
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					9.6			38.1				24.8
LOS					A			D				C
Approach Delay (s/veh)					9.6			38.1				24.8
Approach LOS					A			D				C
Queue Length 50th (ft)					135			93				73
Queue Length 95th (ft)					291			146				124
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)					1247			685				805
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.57			0.35				0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave



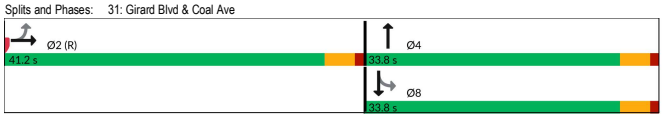
Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Future Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.990						0.978				
Flt Protected		0.994									0.990	
Satd. Flow (prot)	0	1866	0	0	0	0	0	1851	0	0	1881	0
Flt Permitted		0.994									0.823	
Satd. Flow (perm)	0	1865	0	0	0	0	0	1851	0	0	1563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	80	553	50	0	0	0	0	159	31	40	163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	190	0	0	203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.7						13.3			13.3	
Actuated g/C Ratio		0.70						0.18			0.18	
v/c Ratio		0.52						0.56			0.73	
Control Delay (s/veh)		20.5						31.4			44.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		20.5						31.4			44.2	
LOS		C						C			D	
Approach Delay (s/veh)		20.5						31.4			44.2	
Approach LOS		C						C			D	
Queue Length 50th (ft)		319						75			90	
Queue Length 95th (ft)		425						124			145	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1312						732			610	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.26			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 26.9		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



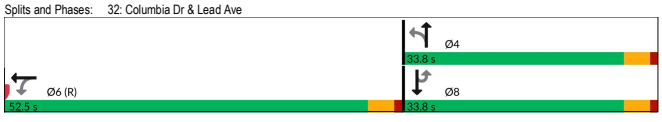
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	733	26	9	24	0	1	0	9
Future Volume (vph)	0	0	0	23	733	26	9	24	0	1	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00				0.98
Frt					0.995							0.909
Flt Protected					0.999			0.987				0.998
Satd. Flow (prot)	0	0	0	0	1889	0	0	1875	0	0	0	1696
Flt Permitted					0.999			0.955				0.997
Satd. Flow (perm)	0	0	0	0	1889	0	0	1812	0	0	0	1694
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					3							21
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		27.2			25.8			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	23	748	27	9	24	0	1	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	798	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8
Permitted Phases				6			4			8		
Minimum Split (s)				41.2	41.2		33.8	33.8		33.8		33.8
Total Split (s)				52.5	52.5		33.8	33.8		33.8		33.8
Total Split (%)				60.8%	60.8%		39.2%	39.2%		39.2%		39.2%
Maximum Green (s)				48.0	48.0		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					48.0			29.3				29.3
Actuated g/C Ratio					0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	21
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio					0.76			0.05				0.05
Control Delay (s/veh)					20.6			19.6				11.0
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					20.6			19.6				11.0
LOS					C			B				B
Approach Delay (s/veh)					20.6			19.6				11.0
Approach LOS					C			B				B
Queue Length 50th (ft)					309			12				4
Queue Length 95th (ft)					463			32				22
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)					1051			615				589
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.76			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 32: Columbia Dr & Lead Ave



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

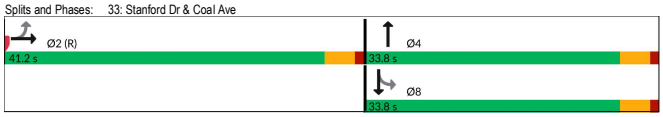
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Future Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			0.99	
Frt		0.999						0.973				
Flt Protected		0.999									0.967	
Satd. Flow (prot)	0	1859	0	0	0	0	0	1800	0	0	1801	0
Flt Permitted		0.999									0.908	
Satd. Flow (perm)	0	1859	0	0	0	0	0	1800	0	0	1681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	18	669	6	0	0	0	0	4	1	11	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	693	0	0	0	0	0	5	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	
v/c Ratio		0.76						0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		22.5						13.2			14.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.5						13.2			14.3	
LOS		C						B			B	
Approach Delay (s/veh)		22.5						13.2			14.3	
Approach LOS		C						B			B	
Queue Length 50th (ft)		248						1			4	
Queue Length 95th (ft)		386						7			16	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		910						703			656	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.76						0.01			0.02	

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.2		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



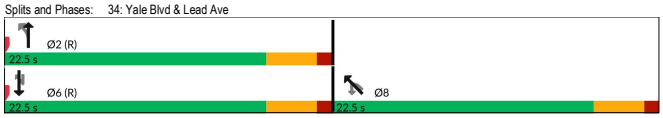
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	213	0	0	142	95	0	0	0	189	564	27
Future Volume (vph)	76	213	0	0	142	95	0	0	0	189	564	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.993	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1850	0
Flt Permitted	0.665									0.950		
Satd. Flow (perm)	1239	1863	0	0	1863	1583	0	0	0	1770	1850	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						97					6	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		844			1282			105			163	
Travel Time (s)		23.0			29.1			2.4			3.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	78	217	0	0	145	97	0	0	0	193	576	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	217	0	0	145	97	0	0	0	193	604	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.16	0.29			0.19	0.14				0.27	0.81	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	4.2	4.5			9.7	3.2				10.4	23.8	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	4.2	4.5			9.7	3.2				10.4	23.8	
LOS	A	A			A	A				B	C	
Approach Delay (s/veh)		4.4			7.1						20.6	
Approach LOS		A			A						C	
Queue Length 50th (ft)	5	14			23	0				32	129	
Queue Length 95th (ft)	m8	m22			50	19				65	#286	
Internal Link Dist (ft)		764			1202				25		83	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	495	745			745	691				708	743	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.16	0.29			0.19	0.14				0.27	0.81	

Intersection Summary

Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 14.6		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 34: Yale Blvd & Lead Ave



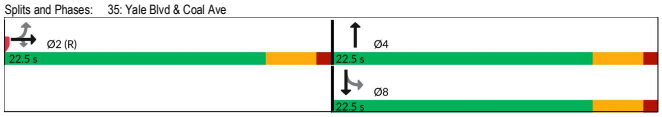
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	493	107	0	0	0	0	274	155	35	296	0
Future Volume (vph)	42	493	107	0	0	0	0	274	155	35	296	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97					0.99		0.99		
Frt			0.850					0.951				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1787	0	1805	1900	0
Flt Permitted	0.950									0.310		
Satd. Flow (perm)	1805	1900	1574	0	0	0	0	1787	0	585	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109					75				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			844	
Travel Time (s)		13.3			8.9			12.4			19.2	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	503	109	0	0	0	0	280	158	36	302	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	503	109	0	0	0	0	438	0	36	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	22.0	22.0	22.0					14.0		14.0	14.0	
Actuated g/C Ratio	0.49	0.49	0.49					0.31		0.31	0.31	
v/c Ratio	0.05	0.54	0.13					0.72		0.20	0.51	
Control Delay (s/veh)	7.9	12.1	2.9					17.9		17.0	19.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	7.9	12.1	2.9					17.9		17.0	19.2	
LOS	A	B	A					B		B	B	
Approach Delay (s/veh)		10.3						17.9			19.0	
Approach LOS		B						B			B	
Queue Length 50th (ft)	5	84	0					77		7	82	
Queue Length 95th (ft)	20	181	20					134		31	142	
Internal Link Dist (ft)		507				310		465			764	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	881	927	823					759		234	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.05	0.54	0.13					0.58		0.15	0.40	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay (s/veh): 14.7		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 35: Yale Blvd & Coal Ave

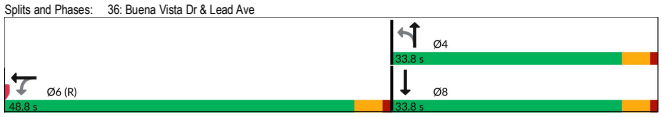


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Future Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.928	
Flt Protected					0.999			0.960				
Satd. Flow (prot)	0	0	0	0	1893	0	0	1824	0	0	1738	0
Flt Permitted					0.999			0.801				
Satd. Flow (perm)	0	0	0	0	1893	0	0	1516	0	0	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	19	759	11	58	11	0	0	7	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	789	0	0	69	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.78			0.13			0.02	
Control Delay (s/veh)					21.9			18.9			12.7	
Queue Delay					0.7			0.0			0.0	
Total Delay (s/veh)					22.6			18.9			12.7	
LOS					C			B			B	
Approach Delay (s/veh)					22.6			18.9			12.7	
Approach LOS					C			B			B	
Queue Length 50th (ft)					304			24			2	
Queue Length 95th (ft)					461			52			14	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1015			537			621	
Starvation Cap Reductn					54			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.82			0.13			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 22.1		Intersection LOS: C	
Intersection Capacity Utilization 69.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

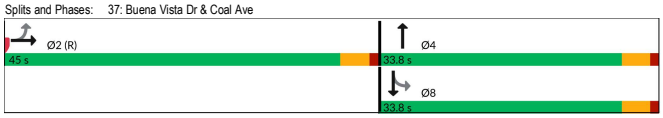


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Future Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.98			0.99	
Frt		0.991						0.942				
Flt Protected		0.998									0.987	
Satd. Flow (prot)	0	1872	0	0	0	0	0	1762	0	0	1875	0
Flt Permitted		0.998									0.897	
Satd. Flow (perm)	0	1869	0	0	0	0	0	1762	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	632	48	0	0	0	0	41	31	8	23	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	710	0	0	0	0	0	72	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.9						8.3			8.3	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.46						0.34			0.17	
Control Delay (s/veh)		3.9						25.7			34.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		3.9						25.7			34.3	
LOS		A						C			C	
Approach Delay (s/veh)		3.9						25.7			34.3	
Approach LOS		A						C			C	
Queue Length 50th (ft)		87						19			14	
Queue Length 95th (ft)		153						55			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1539						674			629	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.46						0.11			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Future Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0		0	
Storage Lanes	0		0	0		1	1		0		0	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	0.91
Ped Bike Factor					1.00	0.98	1.00					1.00
Frt						0.850						0.979
Flt Protected					0.994		0.950					
Satd. Flow (prot)	0	0	0	0	1889	1615	1805	5187	0	0	0	5058
Flt Permitted					0.994		0.440					0.939
Satd. Flow (perm)	0	0	0	0	1887	1586	833	5187	0	0	0	4749
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)						80						38
Link Speed (mph)		30			30			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		48.6			22.7			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	85	647	99	60	284	0	2	0	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	732	99	60	284	0	0	0	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2	1	1	2		1		2
Detector Template				Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)				20	100	20	20	100		20		100
Trailing Detector (ft)				0	0	0	0	0		0		0
Detector 1 Position(ft)				0	0	0	0	0		0		0
Detector 1 Size(ft)				20	6	20	20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA	Perm	pm+pt	NA		Perm		NA
Protected Phases					6		7	4				8
Permitted Phases				6		6	4			8		
Detector Phase				6	6	6	7	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0		8.0		8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%		30.0%		30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0		18.0		18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5		3.5		3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				0.0
Total Lost Time (s)					5.5	5.5	4.0	4.5				4.5
Lead/Lag							Lead			Lag		Lag
Lead-Lag Optimize?							Yes			Yes		Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0		3.0		3.0
Recall Mode				C-Max	C-Max	C-Max	None	Max		Max		Max
Walk Time (s)				7.0	7.0	7.0		7.0		7.0		7.0
Flash Don't Walk (s)				23.0	23.0	23.0		10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0	0		0		0		0
Act Effct Green (s)					32.0	32.0	33.5	33.0				26.9
Actuated g/C Ratio					0.43	0.43	0.45	0.44				0.36
v/c Ratio					0.91	0.14	0.14	0.12				0.23
Control Delay (s/veh)					38.2	5.2	12.7	12.6				16.8
Queue Delay					0.0	0.0	0.0	0.0				0.0
Total Delay (s/veh)					38.2	5.2	12.7	12.6				16.8
LOS					D	A	B	B				B
Approach Delay (s/veh)					34.2			12.7				16.8
Approach LOS					C			B				B
Queue Length 50th (ft)					307	5	15	27				46
Queue Length 95th (ft)					#526	31	35	42				71
Internal Link Dist (ft)		2058			918			690				1038
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					805	722	514	2282				1726
Starvation Cap Reductn					0	0	0	0				0
Spillback Cap Reductn					0	0	0	0				0
Storage Cap Reductn					0	0	0	0				0
Reduced v/c Ratio					0.91	0.14	0.12	0.12				0.23

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91

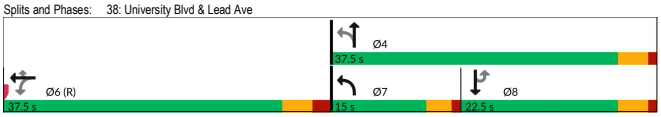
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 25.1	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Future Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				0.99					0.94			
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.497		
Satd. Flow (perm)	0	0	0	1794	1900	1615	0	5187	1526	944	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			106			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

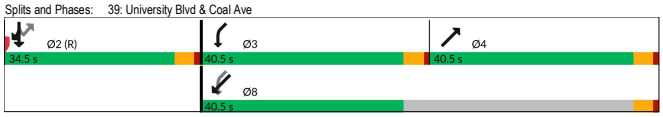
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.06	1.01	0.17		0.18	0.07	0.11	0.09	
Control Delay (s/veh)				32.7	86.2	13.8		29.4	0.1	7.3	7.1	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.7	86.2	13.8		29.4	0.1	7.3	7.1	
LOS				C	F	B		C	A	A	A	
Approach Delay (s/veh)					74.4			21.5			7.1	
Approach LOS					E			C			A	
Queue Length 50th (ft)				15	~377	12		57	0	23	28	
Queue Length 95th (ft)				38	#598	51		81	0	42	40	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				465	493	461		1616	1526	893	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.06	1.01	0.17		0.18	0.07	0.11	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	

Intersection Signal Delay (s/veh): 39.8	Intersection LOS: D
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave



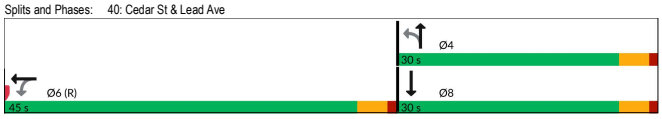
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Future Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.888	
Flt Protected					0.998			0.986				
Satd. Flow (prot)	0	0	0	0	1889	0	0	1873	0	0	1687	0
Flt Permitted					0.998			0.866				
Satd. Flow (perm)	0	0	0	0	1889	0	0	1645	0	0	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						83	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	30	786	20	16	39	0	0	17	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	836	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					61.1			8.3			8.3	
Actuated g/C Ratio					0.81			0.11			0.11	
v/c Ratio					0.54			0.30			0.38	
Control Delay (s/veh)					8.3			35.3			15.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					8.3			35.3			15.0	
LOS					A			D			B	
Approach Delay (s/veh)					8.3			35.3			15.0	
Approach LOS					A			D			B	
Queue Length 50th (ft)					203			24			7	
Queue Length 95th (ft)					m253			56			49	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1539			559			628	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.54			0.10			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave



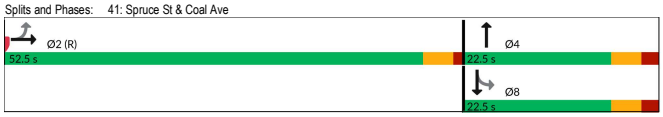
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Future Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.932				
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1733	0	0	1858	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	1895	0	0	0	0	0	1733	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	608	7	0	0	0	0	7	7	8	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	631	0	0	0	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.35						0.07			0.09	
Control Delay (s/veh)		1.6						24.0			31.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.6						24.0			31.4	
LOS		A						C			C	
Approach Delay (s/veh)		1.6						24.0			31.4	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						3			8	
Queue Length 95th (ft)		122						19			26	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1804						398			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.35						0.04			0.04	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.35
Intersection Signal Delay (s/veh): 2.9 Intersection LOS: A
Intersection Capacity Utilization 56.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Future Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						196	72					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

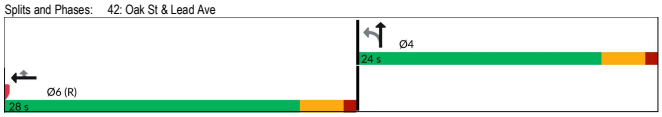
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					31.1	31.1	11.9	11.9				
Actuated g/C Ratio					0.60	0.60	0.23	0.23				
v/c Ratio					0.37	0.45	0.15	0.59				
Control Delay (s/veh)					7.4	5.5	5.2	20.4				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					7.4	5.5	5.2	20.4				
LOS					A	A	A	C				
Approach Delay (s/veh)					6.4			18.5				
Approach LOS					A			B				
Queue Length 50th (ft)					54	32	0	71				
Queue Length 95th (ft)					128	101	21	96				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1134	1026	721	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.37	0.45	0.10	0.36				

Intersection Summary

Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Future Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.968				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4997	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4997	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	318							63				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	321	673	0	0	0	0	0	236	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	673	0	0	0	0	0	299	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.28	0.64						0.26				
Control Delay (s/veh)	1.5	10.4						12.0				
Queue Delay	0.0	0.8						0.0				
Total Delay (s/veh)	1.5	11.2						12.0				
LOS	A	B						B				
Approach Delay (s/veh)		8.1						12.0				
Approach LOS		A						B				
Queue Length 50th (ft)	0	102						18				
Queue Length 95th (ft)	23	186						35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1144	1055						1926				
Starvation Cap Reductn	0	152						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.28	0.75						0.16				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	

Intersection Signal Delay (s/veh): 9.0	Intersection LOS: A
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

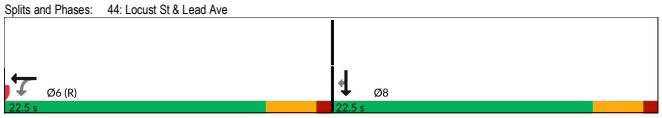
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Future Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.968	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	1900	0	0	0	0	0	3347	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	1900	0	0	0	0	0	3347	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				92							86	220
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	92	463	0	0	0	0	0	393	328
Shared Lane Traffic (%)												33%
Lane Group Flow (vph)	0	0	0	92	463	0	0	0	0	0	501	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.7	22.7						13.3	13.3
Actuated g/C Ratio				0.50	0.50						0.30	0.30
v/c Ratio				0.10	0.48						0.48	0.37
Control Delay (s/veh)				2.8	10.6						11.6	3.9
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.8	10.6						11.6	3.9
LOS				A	B						B	A
Approach Delay (s/veh)					9.4						9.2	
Approach LOS					A						A	
Queue Length 50th (ft)				0	67						47	0
Queue Length 95th (ft)				18	163						65	31
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				954	956						1390	720
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.10	0.48						0.36	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	

Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



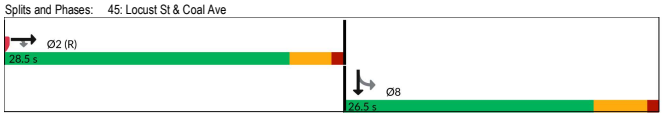
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Future Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.99									
Frt			0.850									
Flt Protected										0.950	0.967	
Satd. Flow (prot)	0	1900	1615	0	0	0	0	0	0	1643	3344	0
Flt Permitted										0.950	0.967	
Satd. Flow (perm)	0	1900	1593	0	0	0	0	0	0	1643	3344	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			65							180	180	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	595	67	0	0	0	0	0	0	400	91	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	595	67	0	0	0	0	0	0	200	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		34.5	34.5							10.5	10.5	
Actuated g/C Ratio		0.63	0.63							0.19	0.19	
v/c Ratio		0.50	0.07							0.44	0.37	
Control Delay (s/veh)		7.6	1.7							8.0	9.4	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		7.6	1.7							8.0	9.4	
LOS		A	A							A	A	
Approach Delay (s/veh)		7.0									8.8	
Approach LOS		A									A	
Queue Length 50th (ft)		85	0							6	17	
Queue Length 95th (ft)		168	11							52	43	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1192	1024							738	1388	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.50	0.07							0.27	0.21	

Intersection Summary
Area Type: Other
Cycle Length: 55
Actuated Cycle Length: 55
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 7.8 Intersection LOS: A
Intersection Capacity Utilization 48.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 45: Locust St & Coal Ave

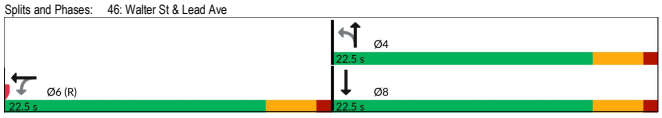


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Future Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.994						0.932	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	1884	0	0	1866	0	0	1747	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1884	0	0	1900	0	0	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						5	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	650	30	4	7	0	0	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	696	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.40			0.03			0.03	
Control Delay (s/veh)					1.8			22.4			12.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.8			22.4			12.8	
LOS					A			C			B	
Approach Delay (s/veh)					1.8			22.4			12.8	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			3			1	
Queue Length 95th (ft)					96			m12			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					1742			760			701	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.40			0.01			0.01	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 22.5 (50%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.40
Intersection Signal Delay (s/veh): 2.2 Intersection LOS: A
Intersection Capacity Utilization 58.2% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



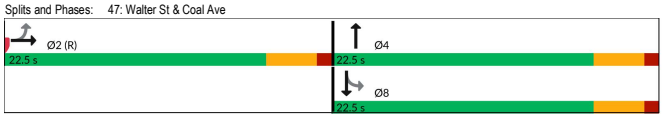
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Future Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.900				
Flt Protected											0.983	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1682	0	0	1868	0
Flt Permitted												
Satd. Flow (perm)	0	1898	0	0	0	0	0	1682	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						23				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		838			715			226			362	
Travel Time (s)		19.0			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	608	3	0	0	0	0	8	23	7	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.35						0.10			0.06	
Control Delay (s/veh)		2.3						10.1			16.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.3						10.1			16.3	
LOS		A						B			B	
Approach Delay (s/veh)		2.3						10.1			16.3	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			5	
Queue Length 95th (ft)		127						18			m12	
Internal Link Dist (ft)		758			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1755						686			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.35						0.05			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 3.1		Intersection LOS: A	
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Future Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						0.99		1.00				
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	1754	3574	0	0	3574
Flt Permitted				0.950				0.482				
Satd. Flow (perm)	0	0	0	1805	1900	1593	0	887	3574	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						56						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	0	0	0	77	463	96	2	67	371	0	0	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	77	463	96	0	69	371	0	0	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1589
Right Turn on Red	Yes
Satd. Flow (RTOR)	79
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	79
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	24.2	24.2	47.3			47.3
Total Split (s)				38.5	38.5	38.5	31.9	31.9	47.3			47.3
Total Split (%)				32.7%	32.7%	32.7%	27.1%	27.1%	40.2%			40.2%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	42.8			42.8
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		46.9	42.8			42.8
Actuated g/C Ratio				0.50	0.50	0.50		0.40	0.36			0.36
v/c Ratio				0.09	0.49	0.12		0.18	0.29			0.28
Control Delay (s/veh)				16.8	22.5	8.2		21.9	27.4			27.2
Queue Delay				0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)				16.8	22.5	8.2		21.9	27.4			27.2
LOS				B	C	A		C	C			C
Approach Delay (s/veh)					19.7				26.5			23.4
Approach LOS					B				C			C
Queue Length 50th (ft)				31	234	16		30	104			101
Queue Length 95th (ft)				59	330	46		59	143			140
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				896	943	819		730	1299			1299
Starvation Cap Reductn				0	0	0		0	0			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.09	0.49	0.12		0.09	0.29			0.28

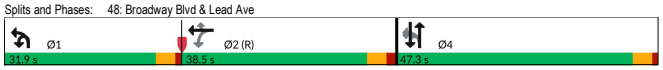
Intersection Summary	
Area Type:	Other
Cycle Length: 117.7	
Actuated Cycle Length: 117.7	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	42.8
Actuated g/C Ratio	0.36
v/c Ratio	0.13
Control Delay (s/veh)	6.0
Queue Delay	0.0
Total Delay (s/veh)	6.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	32
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	628
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 22.7	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Future Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.99		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3574	1615	0	1805	3610
Flt Permitted	0.950										0.459	
Satd. Flow (perm)	1798	3610	1589	0	0	0	0	3574	1594	0	871	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			66						69			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			267			421				359
Travel Time (s)		10.8			6.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	36	489	66	0	0	0	0	394	52	4	64	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	66	0	0	0	0	394	52	0	68	362
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

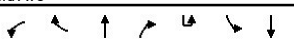
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9		61.4	37.9
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34		0.56	0.34
v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29
Control Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
LOS	C	C	A					C	A		B	C
Approach Delay (s/veh)		28.8						24.7				24.4
Approach LOS		C						C				C
Queue Length 50th (ft)	18	144	0					106	0		19	97
Queue Length 95th (ft)	42	194	31					147	18		37	136
Internal Link Dist (ft)		395			187			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	557	1119	538					1231	594		681	1243
Starvation Cap Reductn	0	0	0					0	0		0	0
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 26.3		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

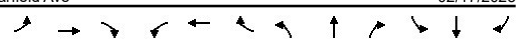
Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	



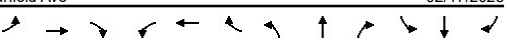
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	61	361
Future Volume (vph)	42	26	420	18	1	61	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.993
Satd. Flow (prot)	1713	0	1853	0	0	0	1850
Flt Permitted	0.970						0.993
Satd. Flow (perm)	1713	0	1853	0	0	0	1850
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	62	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	431
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.2%	ICU Level of Service B	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.970			0.997			0.987	
Flt Protected		0.993			0.989			0.997			0.999	
Satd. Flow (prot)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.993			0.989			0.997			0.999	
Satd. Flow (perm)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	65	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	29.1%	ICU Level of Service A	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.899			0.999			0.994	
Flt Protected		0.997			0.988		0.950			0.950		
Satd. Flow (prot)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.997			0.988		0.950			0.950		
Satd. Flow (perm)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	64	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.6%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	58	9	5	7	6	1
Future Volume (vph)	58	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.982				0.981	
Flt Protected	0.958			0.980		
Satd. Flow (prot)	1787	0	0	1862	1864	0
Flt Permitted	0.958			0.980		
Satd. Flow (perm)	1787	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	59	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.2%		ICU Level of Service A	
Analysis Period (min) 15			

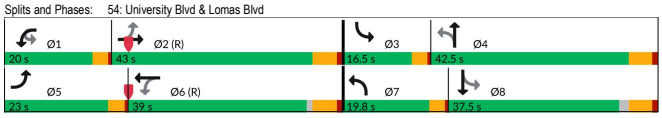
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99		0.98	1.00	1.00
Frt		0.981				0.968				0.850		0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11		11	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2			1	6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 122			
Actuated Cycle Length: 122			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

Intersection Summary

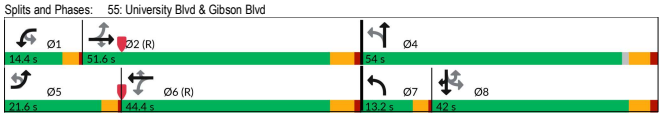
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9 Intersection LOS: C
Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	449	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	449	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.994				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3584	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3584	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	458	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	478	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.37			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	28.7			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	28.7			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				31.0				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	139			30	161	
Queue Length 95th (ft)		#354	350	13		60	185			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1300			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.37			0.17	0.57	

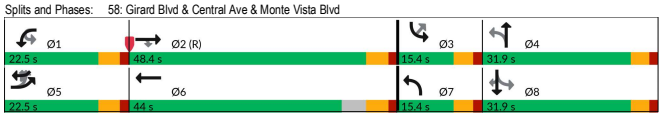
Intersection Summary
Area Type: Other
Cycle Length: 118.2
Actuated Cycle Length: 118.2
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.52

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 92.8 Intersection LOS: F
Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	867	0	0	0
Future Volume (vph)	0	0	867	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	885	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	885	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 147
Actuated Cycle Length: 147
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07

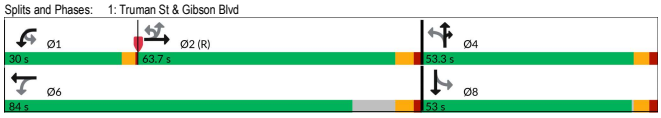
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary

Intersection Signal Delay (s/veh): 30.5 Intersection LOS: C
Intersection Capacity Utilization 71.2% ICU Level of Service C
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

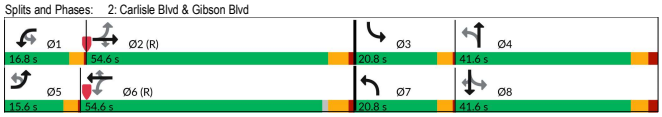
Intersection Summary
Area Type: Other
Cycle Length: 133.8
Actuated Cycle Length: 133.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6 Intersection LOS: B
Intersection Capacity Utilization 82.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



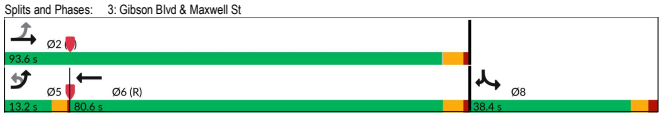
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 132.2	
Actuated Cycle Length: 132.2	
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	

Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

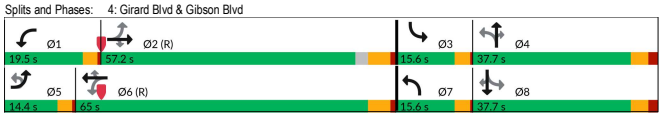
Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary	

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor						0.99		0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

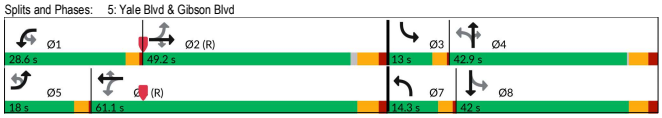
Intersection Summary
Area Type: Other
Cycle Length: 135.4
Actuated Cycle Length: 135.4
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 21.0 Intersection LOS: C

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization 76.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

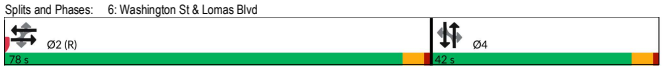
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.1	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

Intersection Summary

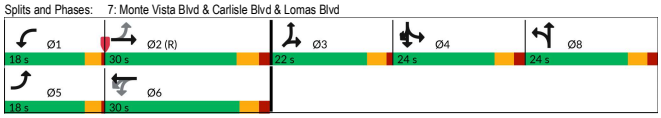
Area Type: Other
Cycle Length: 118
Actuated Cycle Length: 118
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay (s/veh): 84.6 Intersection LOS: F
Intersection Capacity Utilization 100.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



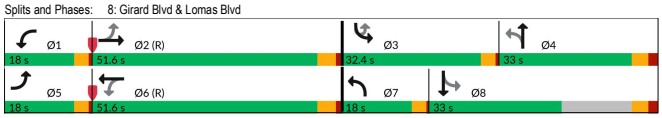
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 30.3 Intersection LOS: C
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

Intersection Summary

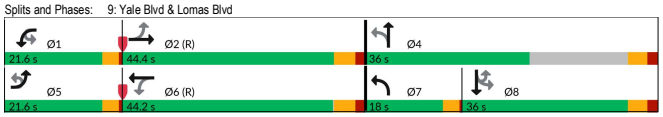
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

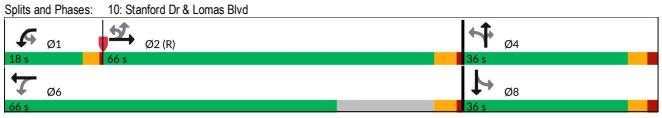
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	86	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	86	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.242				0.182			0.245			0.320
Satd. Flow (perm)	0	446	1881	0	0	346	1883	0	463	1869	0	603
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			701		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	90	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	90	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

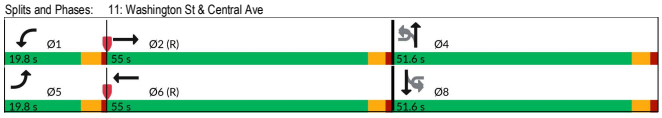
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		18.1	64.7			22.0	71.2		25.2	25.2		25.2
Actuated g/C Ratio		0.14	0.51			0.17	0.56		0.20	0.20		0.20
v/c Ratio		0.68	0.42			0.90	0.41		0.98	0.68		0.08
Control Delay (s/veh)		95.8	23.2			142.7	20.9		137.8	54.8		39.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	23.2			142.7	20.9		137.8	54.8		39.0
LOS		F	C			F	C		F	D		D
Approach Delay (s/veh)			30.3				34.2			76.4		
Approach LOS			C				C			E		
Queue Length 50th (ft)		34	201			43	209		74	193		6
Queue Length 95th (ft)		74	347			#117	380		#161	263		20
Internal Link Dist (ft)			1288				848			621		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		68	963			61	1061		170	691		222
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.63	0.42			0.89	0.41		0.53	0.37		0.04

Intersection Summary

Area Type: Other
Cycle Length: 126.4
Actuated Cycle Length: 126.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay (s/veh): 47.2 Intersection LOS: D
Intersection Capacity Utilization 66.6% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	25.2	
Actuated g/C Ratio	0.20	
v/c Ratio	0.78	
Control Delay (s/veh)	60.6	
Queue Delay	0.0	
Total Delay (s/veh)	60.6	
LOS	E	
Approach Delay (s/veh)	60.0	
Approach LOS	E	
Queue Length 50th (ft)	223	
Queue Length 95th (ft)	301	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

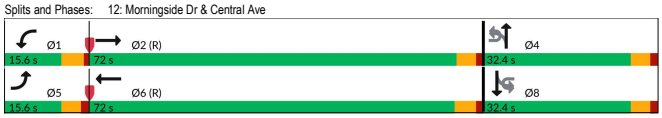
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	497	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	497	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	949	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	518	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	525	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.36			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	7.9			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	7.9			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.4			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	146			25		
Queue Length 95th (ft)		51	203			48	272			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.36			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 14.9		Intersection LOS: B	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	435	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	435	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	279	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	453	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	453	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.64	0.08	0.14	0.78		0.32
Control Delay (s/veh)		441.3	29.9	1.9		176.2	36.1	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		441.3	29.9	1.9		176.2	36.1	0.2	28.4	60.0		32.6
LOS		F	C	A		F	D	A	C	E		C
Approach Delay (s/veh)			107.2				48.7			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~130	221	0		50	288	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	405	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.64	0.08	0.13	0.57		0.31

Intersection Summary

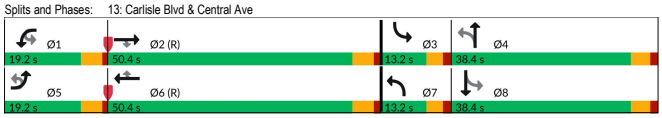
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.78
Intersection Signal Delay (s/veh): 67.5 Intersection LOS: E
Intersection Capacity Utilization 66.5% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	472	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	472	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00			1.00	1.00			0.94		
Frt			0.990				0.996			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1891	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	973	1872	0	0	1026	1891	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	492	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	507	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

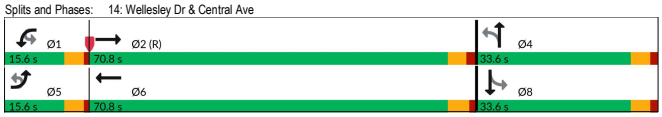
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.2			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.34			0.35		
Control Delay (s/veh)		64.7	4.3			58.7	6.9			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.7	4.3			58.7	6.9			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.3			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	126			19		
Queue Length 95th (ft)		50	98			46	242			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		99	1471			103	1485			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.34			0.12		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.2	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	469	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	469	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.997			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1893	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	968	1880	0	0	1051	1893	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	489	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	498	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.34			0.39		
Control Delay (s/veh)		60.3	7.3			69.9	3.9			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.3	7.3			69.9	3.9			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				7.0			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	64			32		
Queue Length 95th (ft)		49	259			51	86			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		97	1469			102	1471			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.34			0.15		

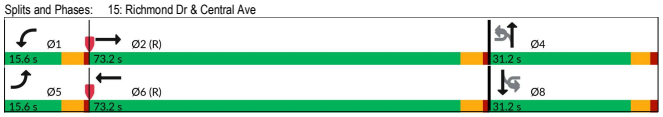
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary

Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	576	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	576	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.97	1.00			0.98		
Frt			0.993				0.989			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3553	0	0	1731	0	0
Flt Permitted		0.556				0.500				0.873		
Satd. Flow (perm)	0	1028	3574	0	0	925	3553	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				11			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	600	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	646	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.31	0.25			0.38	0.27			0.27		
Control Delay (s/veh)		37.0	8.9			38.7	8.4			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		37.0	8.9			38.7	8.4			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	74			14		
Queue Length 95th (ft)		43	137			51	142			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		144	2391			138	2416			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.26	0.25			0.34	0.27			0.10		

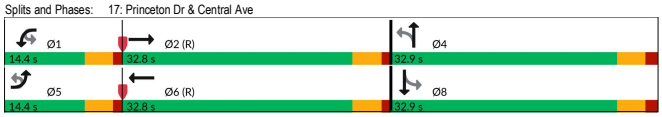
Intersection Summary	
Area Type:	Other
Cycle Length: 80.1	
Actuated Cycle Length: 80.1	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary	

Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	596	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	596	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				3			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	621	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	634	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.22			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.5			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.5			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	33			2		8	1
Queue Length 95th (ft)	36	103			30	98			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.22			0.04		0.03	0.06

Intersection Summary

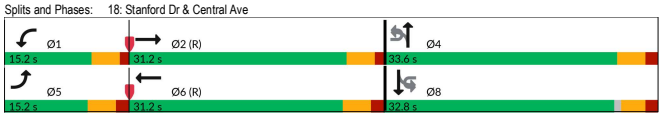
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.22

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 6.7	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



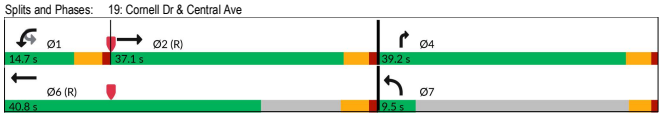
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	604	22	22
Future Volume (vph)	587	58	1	33	604	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	629	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	629	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.19	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.4	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	43	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	525	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.22	0.03	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 91	
Actuated Cycle Length: 91	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.31	

Intersection Signal Delay (s/veh): 5.0	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	155	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	155	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1274			105
Travel Time (s)		32.1				17.0			34.7			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	161	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	164	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			3.09	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			997.4	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			997.4	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				252.5			33.3			44.8
Approach LOS		D				F			C			D
Queue Length 50th (ft)	16	222			~217	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#386	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1194			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			3.09	0.19		0.37	0.05	0.20	0.09	0.15

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.09

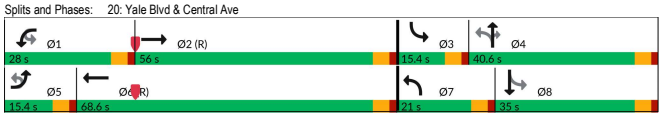
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 126.0	Intersection LOS: F
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Future Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.97		0.97	0.99		0.99
Frt			0.993				0.960			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	3372	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1881	0	0	151	3372	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				36			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	438	22	10	49	418	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	460	0	0	59	572	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.2			47.1	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.38			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.64			1.44	0.39		0.27	0.72		0.67
Control Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
LOS		F	D			F	C		D	E		E
Approach Delay (s/veh)			75.5				60.8			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	417			~90	210		42	159		168
Queue Length 95th (ft)		#197	553			#206	284		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	724			41	1480		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.64			1.44	0.39		0.18	0.39		0.49

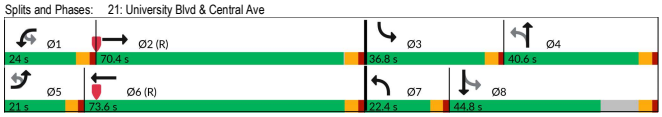
Intersection Summary	
Area Type:	Other
Cycle Length: 172	
Actuated Cycle Length: 172	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary

Intersection Signal Delay (s/veh): 68.0 Intersection LOS: E
Intersection Capacity Utilization 73.0% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Future Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94		1.00			0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.437				0.452			0.950			
Satd. Flow (perm)	0	830	1900	1513	0	858	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							690	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	444	66	6	30	524	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	444	66	0	36	524	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.53		0.04	
Control Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			6.5				5.7			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	122	0		5	98		98		0	
Queue Length 95th (ft)		3	194	14		13	231		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		788	1389	1124		785	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.21		0.04	

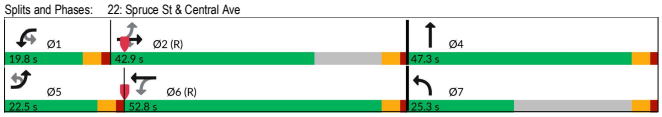
Intersection Summary
Area Type: Other
Cycle Length: 122.6
Actuated Cycle Length: 122.6
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 51.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	643	137	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	643	137	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		0.99		1.00	0.99		1.00	0.99
Frt				0.850		0.974			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1804	1900	1615	1805	3498	0	1805	1830	0	1805	1730
Flt Permitted		0.290			0.414			0.455			0.704	
Satd. Flow (perm)	0	550	1900	1566	787	3498	0	863	1830	0	1336	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		32			15			68
Link Speed (mph)			30			30			30			30
Link Distance (ft)			388			341			419			295
Travel Time (s)			8.8			7.8			9.5			6.7
Confl. Peds. (#/hr)		3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	670	143	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	25.5%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	18.5	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		65.0	62.4	62.4	58.9	53.7		12.3	12.3		12.3	12.3
Actuated g/C Ratio		0.75	0.72	0.72	0.68	0.62		0.14	0.14		0.14	0.14
v/c Ratio		0.32	0.44	0.02	0.02	0.37		0.34	0.30		0.34	0.64
Control Delay (s/veh)		5.1	7.3	0.0	4.0	9.0		39.5	29.0		36.9	31.7
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	7.3	0.0	4.0	9.0		39.5	29.0		36.9	31.7
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			6.7			8.9			32.6			33.0
Approach LOS			A			A			C			C
Queue Length 50th (ft)		19	97	0	1	95		21	33		33	65
Queue Length 95th (ft)		46	271	0	7	170		49	68		66	124
Internal Link Dist (ft)			308			261			339			215
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		690	1373	1153	810	2189		245	530		379	539
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.24	0.44	0.02	0.02	0.37		0.17	0.15		0.17	0.36

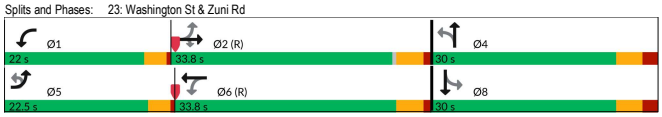
Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 12.7 Intersection LOS: B
Intersection Capacity Utilization 67.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 23: Washington St & Zuni Rd

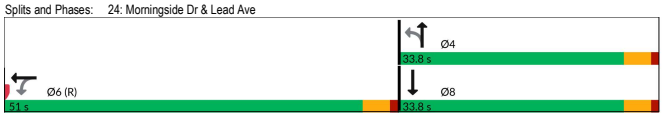


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	785	13	11	10	0	0	17	60
Future Volume (vph)	0	0	0	11	785	13	11	10	0	0	17	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.895	
Flt Protected					0.999			0.974				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1851	0	0	1664	0
Flt Permitted					0.999			0.904				
Satd. Flow (perm)	0	0	0	0	1894	0	0	1718	0	0	1664	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	11	818	14	11	10	0	0	18	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	843	0	0	21	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.81			0.04			0.13	
Control Delay (s/veh)					23.5			18.8			7.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					23.5			18.8			7.9	
LOS					C			B			A	
Approach Delay (s/veh)					23.5			18.8			7.9	
Approach LOS					C			B			A	
Queue Length 50th (ft)					341			7			6	
Queue Length 95th (ft)					516			23			35	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1039			593			616	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.81			0.04			0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 22.1		Intersection LOS: C	
Intersection Capacity Utilization 64.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	753	44	156	278	0	0	185	53
Future Volume (vph)	0	0	0	57	753	44	156	278	0	0	185	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						1.00	
Frt					0.993						0.970	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	1879	0	1805	1900	0	0	1834	0
Flt Permitted					0.997		0.291					
Satd. Flow (perm)	0	0	0	0	1879	0	553	1900	0	0	1834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	59	784	46	163	290	0	0	193	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	889	0	163	290	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					42.2		24.8	23.8			13.5	
Actuated g/C Ratio					0.56		0.33	0.32			0.18	
v/c Ratio					0.84		0.55	0.48			0.72	
Control Delay (s/veh)					24.5		26.3	24.4			38.4	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					24.5		26.3	24.4			38.4	
LOS					C		C	C			D	
Approach Delay (s/veh)					24.5			25.1			38.4	
Approach LOS					C			C			D	
Queue Length 50th (ft)					318		41	81			101	
Queue Length 95th (ft)					#630		m69	m116			163	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1060		299	722			453	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.84		0.55	0.40			0.55	

Intersection Summary		
Area Type:	Other	
Cycle Length: 75		
Actuated Cycle Length: 75		
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		

Intersection Signal Delay (s/veh): 26.8	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Future Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.978						0.976				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1847	0	1805	1900	0
Flt Permitted		0.995								0.204		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1847	0	388	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	79	611	132	0	0	0	0	372	81	23	228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	822	0	0	0	0	0	453	0	23	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

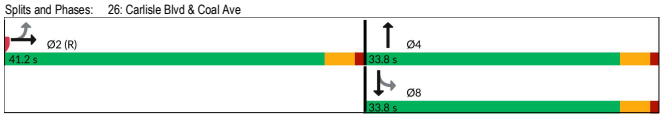
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		43.7						22.3		22.3	22.3	
Actuated g/C Ratio		0.58						0.30		0.30	0.30	
v/c Ratio		0.76						0.81		0.20	0.40	
Control Delay (s/veh)		19.7						34.5		37.6	38.3	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		19.7						34.5		37.6	38.3	
LOS		B						C		D	D	
Approach Delay (s/veh)		19.7						34.5			38.2	
Approach LOS		B						C			D	
Queue Length 50th (ft)		257						185		11	114	
Queue Length 95th (ft)		#570						253		m16	m146	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1079						731		151	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.76						0.62		0.15	0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 27.2	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Future Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.874				
Flt Protected		0.999									0.974	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Flt Permitted		0.999									0.974	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			676			657			532	
Travel Time (s)		31.0			15.4			14.9			12.1	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	693	8	0	0	0	0	7	95	11	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	715	0	0	0	0	0	102	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

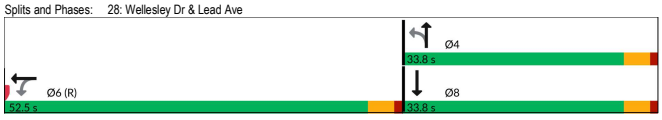
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	806	11	13	17	0	0	7	27
Future Volume (vph)	0	0	0	10	806	11	13	17	0	0	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.998						0.892	
Flt Protected					0.999			0.979				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1860	0	0	1657	0
Flt Permitted					0.999			0.920				
Satd. Flow (perm)	0	0	0	0	1894	0	0	1744	0	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	10	840	11	14	18	0	0	7	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	861	0	0	32	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.82			0.05			0.06	
Control Delay (s/veh)					23.7			19.6			9.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					23.7			19.6			9.4	
LOS					C			B			A	
Approach Delay (s/veh)					23.7			19.6			9.4	
Approach LOS					C			B			A	
Queue Length 50th (ft)					353			12			3	
Queue Length 95th (ft)					#539			31			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			592			581	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.82			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 23.0		Intersection LOS: C	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 28: Wellesley Dr & Lead Ave

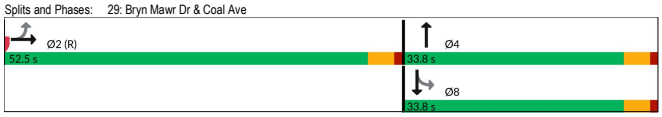


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Future Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00									1.00	
Frt		0.998										
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1900	0	0	1858	0
Flt Permitted		0.999									0.947	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1900	0	0	1791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	817	10	0	0	0	0	5	0	5	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	838	0	0	0	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15			9	15	9
Turn Type	Perm	NA						NA			Perm	NA
Protected Phases		2						4				8
Permitted Phases	2										8	
Minimum Split (s)	41.2	41.2						33.8			33.8	33.8
Total Split (s)	52.5	52.5						33.8			33.8	33.8
Total Split (%)	60.8%	60.8%						39.2%			39.2%	39.2%
Maximum Green (s)	48.0	48.0						29.3			29.3	29.3
Yellow Time (s)	3.5	3.5						3.5			3.5	3.5
All-Red Time (s)	1.0	1.0						1.0			1.0	1.0
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.80						0.01			0.02	
Control Delay (s/veh)		22.4						19.0			19.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.4						19.0			19.2	
LOS		C						B			B	
Approach Delay (s/veh)		22.4						19.0			19.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		337						2			4	
Queue Length 95th (ft)		508						9			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						645			608	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.80						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



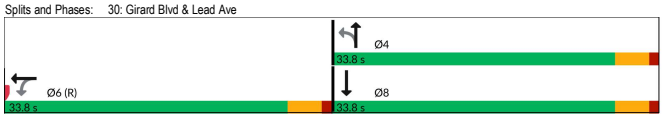
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	854	41	48	208	0	0	175	76
Future Volume (vph)	0	0	0	41	854	41	48	208	0	0	175	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.994						0.959	
Flt Protected					0.998			0.991				
Satd. Flow (prot)	0	0	0	0	1883	0	0	1883	0	0	1809	0
Flt Permitted					0.998			0.755				
Satd. Flow (perm)	0	0	0	0	1883	0	0	1434	0	0	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)	1			1			1		1	1		1
Confl. Bikes (#/hr)				2		5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	43	890	43	50	217	0	0	182	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	976	0	0	267	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					43.5			15.1			15.1	
Actuated g/C Ratio					0.64			0.22			0.22	
v/c Ratio					0.81			0.83			0.60	
Control Delay (s/veh)					18.0			46.1			24.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					18.0			46.1			24.7	
LOS					B			D			C	
Approach Delay (s/veh)					18.0			46.1			24.7	
Approach LOS					B			D			C	
Queue Length 50th (ft)					254			106			81	
Queue Length 95th (ft)					#620			164			131	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1212			621			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.81			0.43			0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 24.2		Intersection LOS: C	
Intersection Capacity Utilization 95.1%		ICU Level of Service F	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 30: Girard Blvd & Lead Ave



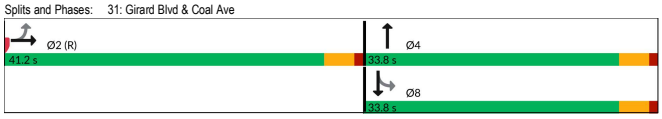
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Future Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.992						0.973				
Flt Protected		0.996									0.990	
Satd. Flow (prot)	0	1874	0	0	0	0	0	1841	0	0	1881	0
Flt Permitted		0.996									0.724	
Satd. Flow (perm)	0	1874	0	0	0	0	0	1841	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6						20				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1						2			2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	802	57	0	0	0	0	182	46	46	177	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	943	0	0	0	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3			14.3	
Actuated g/C Ratio		0.69						0.19			0.19	
v/c Ratio		0.73						0.62			0.85	
Control Delay (s/veh)		24.8						32.2			56.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		24.8						32.2			56.6	
LOS		C						C			E	
Approach Delay (s/veh)		24.8						32.2			56.6	
Approach LOS		C						C			E	
Queue Length 50th (ft)		447						89			101	
Queue Length 95th (ft)		m471						142			162	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1294						731			537	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.73						0.31			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 31.1		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 31: Girard Blvd & Coal Ave

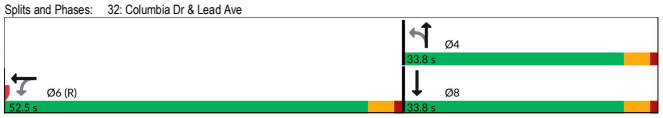


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	883	16	12	23	0	0	15	19
Future Volume (vph)	0	0	0	32	883	16	12	23	0	0	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.998						0.925	
Flt Protected					0.998			0.983				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1868	0	0	1722	0
Flt Permitted					0.998			0.936				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1777	0	0	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	920	17	13	24	0	0	16	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	970	0	0	37	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.92			0.06			0.06	
Control Delay (s/veh)					33.4			19.7			12.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					33.4			19.7			12.0	
LOS					C			B			B	
Approach Delay (s/veh)					33.4			19.7			12.0	
Approach LOS					C			B			B	
Queue Length 50th (ft)					446			13			6	
Queue Length 95th (ft)					#740			34			26	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1052			603			597	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.92			0.06			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 32.1		Intersection LOS: C	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 32: Columbia Dr & Lead Ave

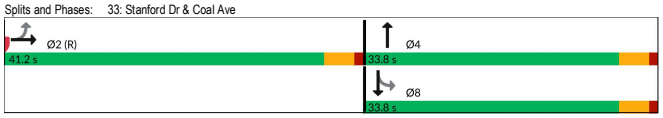


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Future Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			0.99	
Frt		0.999						0.927				
Flt Protected		0.999									0.966	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1733	0	0	1835	0
Flt Permitted		0.999									0.896	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1733	0	0	1689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2				3		3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	872	6	0	0	0	0	6	7	14	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	0	0	0	0	0	13	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.97						0.02			0.03	
Control Delay (s/veh)		44.6						10.7			14.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		44.6						10.7			14.4	
LOS		D						B			B	
Approach Delay (s/veh)		44.6						10.7			14.4	
Approach LOS		D						B			B	
Queue Length 50th (ft)		386						2			6	
Queue Length 95th (ft)		#653						12			18	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		928						681			659	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.97						0.02			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 43.5		Intersection LOS: D	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 33: Stanford Dr & Coal Ave

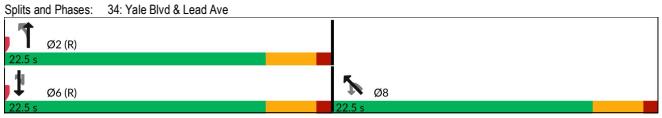


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	117	188	0	0	177	110	0	0	0	204	757	26
Future Volume (vph)	117	188	0	0	177	110	0	0	0	204	757	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.995	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1853	0
Flt Permitted	0.641									0.950		
Satd. Flow (perm)	1194	1863	0	0	1863	1583	0	0	0	1770	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79					5	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			140			171	
Travel Time (s)		23.2			29.0			3.2			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	122	196	0	0	184	115	0	0	0	213	789	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	196	0	0	184	115	0	0	0	213	816	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.26	0.26			0.25	0.17				0.30	1.10	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.2	4.8			10.1	4.8				10.7	81.5	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.2	4.8			10.1	4.8				10.7	81.5	
LOS	A	A			B	A				B	F	
Approach Delay (s/veh)		4.9			8.1						66.8	
Approach LOS		A			A						E	
Queue Length 50th (ft)	8	13			30	5				35	~254	
Queue Length 95th (ft)	m13	m20			62	27				72	#431	
Internal Link Dist (ft)		772			1194			60			91	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	477	745			745	680				708	744	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.26	0.26			0.25	0.17				0.30	1.10	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 1.10
Intersection Signal Delay (s/veh): 44.2 Intersection LOS: D
Intersection Capacity Utilization 83.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Yale Blvd & Lead Ave



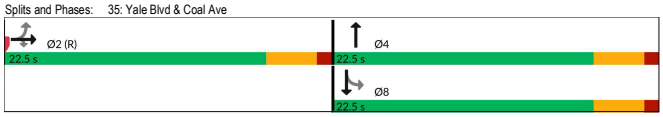
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Future Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97					0.99		1.00		
Frt			0.850					0.945				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1778	0	1805	1900	0
Flt Permitted	0.950									0.267		
Satd. Flow (perm)	1798	1900	1572	0	0	0	0	1778	0	505	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155					82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	771	155	0	0	0	0	293	202	40	336	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	771	155	0	0	0	0	495	0	40	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	21.0	21.0	21.0					15.0		15.0	15.0	
Actuated g/C Ratio	0.47	0.47	0.47					0.33		0.33	0.33	
v/c Ratio	0.06	0.87	0.19					0.77		0.24	0.53	
Control Delay (s/veh)	8.3	28.2	2.8					19.3		17.4	18.5	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	8.3	28.2	2.8					19.3		17.4	18.5	
LOS	A	C	A					B		B	B	
Approach Delay (s/veh)		23.1						19.3			18.4	
Approach LOS		C						B			B	
Queue Length 50th (ft)	7	171	0					87		7	90	
Queue Length 95th (ft)	22	#389	24					159		34	155	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	840	888	817					760		202	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.06	0.87	0.19					0.65		0.20	0.44	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 21.1 Intersection LOS: C
Intersection Capacity Utilization 83.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 35: Yale Blvd & Coal Ave

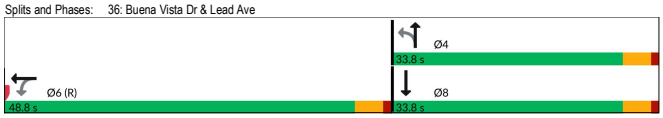


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Future Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.997						0.922	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1830	0	0	1725	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	1890	0	0	1503	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	903	18	81	23	0	0	8	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	939	0	0	104	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.93			0.20			0.03	
Control Delay (s/veh)					34.6			19.8			11.9	
Queue Delay					4.4			0.0			0.0	
Total Delay (s/veh)					39.0			19.8			11.9	
LOS					D			B			B	
Approach Delay (s/veh)					39.0			19.8			11.9	
Approach LOS					D			B			B	
Queue Length 50th (ft)					418			37			3	
Queue Length 95th (ft)					#700			73			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1014			533			618	
Starvation Cap Reductn					45			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.97			0.20			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 36.6		Intersection LOS: D	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

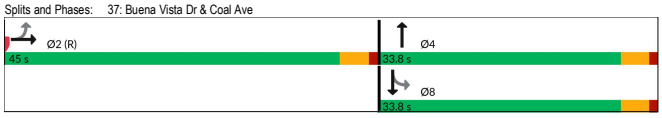


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Future Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			0.99	
Frt		0.994						0.953				
Flt Protected		0.998									0.976	
Satd. Flow (prot)	0	1881	0	0	0	0	0	1791	0	0	1854	0
Flt Permitted		0.998									0.795	
Satd. Flow (perm)	0	1881	0	0	0	0	0	1791	0	0	1499	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	885	45	0	0	0	0	65	35	18	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	966	0	0	0	0	0	100	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.4						8.8			8.8	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.63						0.43			0.22	
Control Delay (s/veh)		6.3						28.2			34.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		6.3						28.2			34.6	
LOS		A						C			C	
Approach Delay (s/veh)		6.3						28.2			34.6	
Approach LOS		A						C			C	
Queue Length 50th (ft)		151						30			17	
Queue Length 95th (ft)		315						73			43	
Internal Link Dist (ft)		546				507		233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1537						687			557	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.63						0.15			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 9.2		Intersection LOS: A	
Intersection Capacity Utilization 73.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Future Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850						0.972
Flt Protected					0.997			0.950				
Satd. Flow (prot)	0	0	0	0	1894	1615	0	1805	5187	0	0	5042
Flt Permitted					0.997			0.341				
Satd. Flow (perm)	0	0	0	0	1894	1589	0	648	5187	0	0	5042
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						80						66
Link Speed (mph)		30			30				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		48.6			22.7				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	55	856	100	1	97	335	0	0	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	911	100	0	98	335	0	0	558
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	2			2
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	20	100			100
Trailing Detector (ft)				0	0	0	0	0	0			0
Detector 1 Position(ft)				0	0	0	0	0	0			0
Detector 1 Size(ft)				20	6	20	20	20	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94				94			94
Detector 2 Size(ft)					6				6			6
Detector 2 Type					Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	104
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0				0.0			0.0
Turn Type				Perm	NA	Perm	custom	pm+pt	NA			NA
Protected Phases					6			7	4			8
Permitted Phases				6		6	7	4				
Detector Phase				6	6	6	7	7	4			8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	20.0%	50.0%			30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	11.0	33.0			18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.0	3.5			3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0	1.0			1.0
Lost Time Adjust (s)					0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)					5.5	5.5		4.0	4.5			4.5
Lead/Lag							Lead	Lead				Lag
Lead-Lag Optimize?							Yes	Yes				Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0			7.0			7.0
Flash Don't Walk (s)				23.0	23.0	23.0			10.0			10.0
Pedestrian Calls (#/hr)				0	0	0			0			0
Act Effct Green (s)					32.0	32.0		33.5	33.0			24.3
Actuated g/C Ratio					0.43	0.43		0.45	0.44			0.32
v/c Ratio					1.13	0.14		0.25	0.15			0.33
Control Delay (s/veh)					96.7	5.2		14.0	12.8			18.4
Queue Delay					0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)					96.7	5.2		14.0	12.8			18.4
LOS					F	A		B	B			B
Approach Delay (s/veh)					87.7				13.1			18.4
Approach LOS					F				B			B
Queue Length 50th (ft)					~500	5		26	32			64
Queue Length 95th (ft)					#716	31		52	49			97
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125				
Base Capacity (vph)					808	723		459	2282			1675
Starvation Cap Reductn					0	0		0	0			0
Spillback Cap Reductn					0	0		0	0			0
Storage Cap Reductn					0	0		0	0			0
Reduced v/c Ratio					1.13	0.14		0.21	0.15			0.33

Intersection Summary

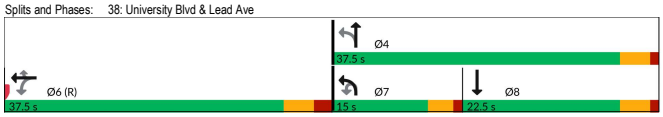
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 52.2	Intersection LOS: D
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Future Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.96	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.462		
Satd. Flow (perm)	0	0	0	1803	1900	1615	0	5187	1554	877	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			119			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

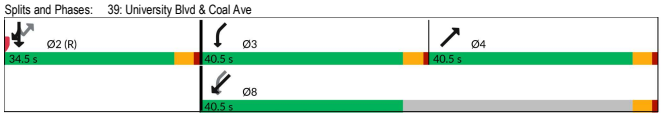
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.07	1.54	0.17		0.21	0.08	0.14	0.11	
Control Delay (s/veh)				32.9	285.3	13.8		29.7	0.1	7.5	7.2	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.9	285.3	13.8		29.7	0.1	7.5	7.2	
LOS				C	F	B		C	A	A	A	
Approach Delay (s/veh)					251.2			22.0			7.3	
Approach LOS					F			C			A	
Queue Length 50th (ft)				19	~795	12		67	0	31	32	
Queue Length 95th (ft)				44	#1031	51		93	0	53	45	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				468	493	461		1616	1554	870	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.07	1.54	0.17		0.21	0.08	0.14	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.54	

Intersection Signal Delay (s/veh): 128.0	Intersection LOS: F
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave



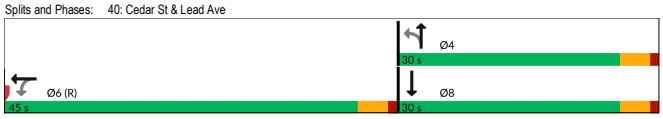
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Future Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.998						0.880	
Flt Protected					0.999			0.991				
Satd. Flow (prot)	0	0	0	0	1893	0	0	1883	0	0	1636	0
Flt Permitted					0.999			0.929				
Satd. Flow (perm)	0	0	0	0	1893	0	0	1765	0	0	1636	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						75	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	20	1084	19	6	26	0	0	26	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1123	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.5			12.5			12.5	
Actuated g/C Ratio					0.71			0.17			0.17	
v/c Ratio					0.83			0.11			0.70	
Control Delay (s/veh)					18.4			25.0			30.3	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					18.4			25.0			30.3	
LOS					B			C			C	
Approach Delay (s/veh)					18.4			25.0			30.3	
Approach LOS					B			C			C	
Queue Length 50th (ft)					368			13			69	
Queue Length 95th (ft)					m359			32			127	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1350			600			605	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.83			0.05			0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 20.6		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave

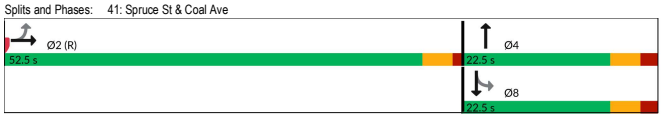


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Future Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.97			1.00	
Frt		0.999						0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1685	0	0	1847	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	1895	0	0	0	0	0	1685	0	0	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	855	6	0	0	0	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	872	0	0	0	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		67.8						8.0			8.0	
Actuated g/C Ratio		0.90						0.11			0.11	
v/c Ratio		0.51						0.03			0.16	
Control Delay (s/veh)		3.5						23.2			32.5	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		3.5						23.2			32.5	
LOS		A						C			C	
Approach Delay (s/veh)		3.5						23.2			32.5	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			13	
Queue Length 95th (ft)		213						12			38	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1713						385			424	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.51						0.02			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 4.6		Intersection LOS: A	
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Future Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1585	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						143	77					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

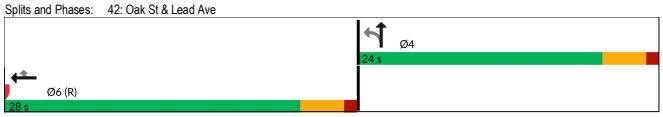
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					29.4	29.4	13.6	13.6				
Actuated g/C Ratio					0.57	0.57	0.26	0.26				
v/c Ratio					0.66	0.71	0.15	0.61				
Control Delay (s/veh)					13.5	13.9	4.5	19.3				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					13.5	13.9	4.5	19.3				
LOS					B	B	A	B				
Approach Delay (s/veh)					13.7			17.5				
Approach LOS					B			B				
Queue Length 50th (ft)					128	98	0	82				
Queue Length 95th (ft)					#341	#326	20	106				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1074	958	725	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.66	0.71	0.11	0.43				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	

Intersection Signal Delay (s/veh): 14.9	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Future Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.963				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4995	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4995	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	334							67				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	418	834	0	0	0	0	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	834	0	0	0	0	0	311	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.36	0.79						0.27				
Control Delay (s/veh)	2.4	15.8						12.0				
Queue Delay	0.0	2.9						0.0				
Total Delay (s/veh)	2.4	18.6						12.0				
LOS	A	B						B				
Approach Delay (s/veh)		13.2						12.0				
Approach LOS		B						B				
Queue Length 50th (ft)	9	145						19				
Queue Length 95th (ft)	37	#345						36				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1151	1055						1928				
Starvation Cap Reductn	0	129						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.36	0.90						0.16				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 13.0	Intersection LOS: B

Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 43: Oak St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Future Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor											0.99	0.98
Frt											0.955	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1787	1900	0	0	0	0	0	3280	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1787	1900	0	0	0	0	0	3280	1436
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				181							120	120
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Peds. (#/hr)	1			1			1		1	2		2
Confl. Bikes (#/hr)				1		10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	182	669	0	0	0	0	0	391	416
Shared Lane Traffic (%)												40%
Lane Group Flow (vph)	0	0	0	182	669	0	0	0	0	0	557	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												

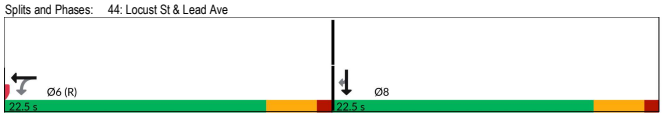
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.2	22.2						13.8	13.8
Actuated g/C Ratio				0.49	0.49						0.31	0.31
v/c Ratio				0.19	0.71						0.51	0.48
Control Delay (s/veh)				2.5	17.6						11.1	9.4
Queue Delay				0.0	0.5						0.0	0.0
Total Delay (s/veh)				2.5	18.0						11.1	9.4
LOS				A	B						B	A
Approach Delay (s/veh)					14.7						10.5	
Approach LOS					B						B	
Queue Length 50th (ft)				0	122						48	27
Queue Length 95th (ft)				26	#322						70	64
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				974	938						1384	646
Starvation Cap Reductn				0	56						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.19	0.76						0.40	0.39

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	

Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 44: Locust St & Lead Ave



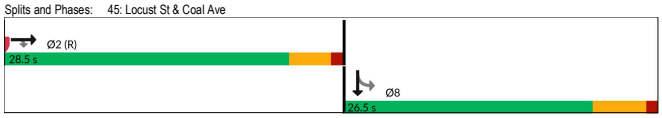
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Future Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98									
Frt			0.850									
Flt Protected										0.950	0.974	
Satd. Flow (prot)	0	1900	1615	0	0	0	0	0	0	1643	3368	0
Flt Permitted										0.950	0.974	
Satd. Flow (perm)	0	1900	1586	0	0	0	0	0	0	1643	3368	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			68							84	84	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	841	99	0	0	0	0	0	0	418	184	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	841	99	0	0	0	0	0	0	209	393	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		33.4	33.4							11.6	11.6	
Actuated g/C Ratio		0.61	0.61							0.21	0.21	
v/c Ratio		0.73	0.10							0.51	0.51	
Control Delay (s/veh)		14.0	2.9							15.8	16.9	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		14.0	2.9							15.8	16.9	
LOS		B	A							B	B	
Approach Delay (s/veh)		12.9									16.6	
Approach LOS		B									B	
Queue Length 50th (ft)		152	3							39	50	
Queue Length 95th (ft)		#424	21							84	75	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1154	989							679	1337	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.73	0.10							0.31	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	

Intersection Capacity Utilization 61.8%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 45: Locust St & Coal Ave



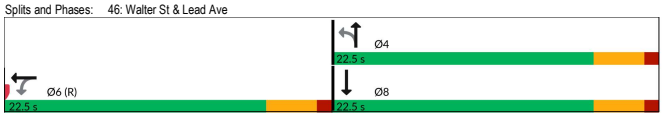
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Future Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.946	
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	1893	0	0	1870	0	0	1782	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1893	0	0	1899	0	0	1782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	24	964	16	3	6	0	0	6	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1004	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.57			0.03			0.03	
Control Delay (s/veh)					5.7			23.4			13.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					5.7			23.4			13.4	
LOS					A			C			B	
Approach Delay (s/veh)					5.7			23.4			13.4	
Approach LOS					A			C			B	
Queue Length 50th (ft)					1			2			1	
Queue Length 95th (ft)					#445			m10			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					1750			759			715	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.57			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



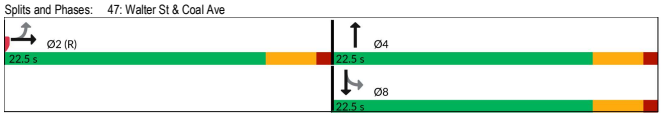
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Future Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.999						0.908				
Flt Protected											0.994	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1725	0	0	1889	0
Flt Permitted											0.957	
Satd. Flow (perm)	0	1898	0	0	0	0	0	1725	0	0	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						15				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		844			715			226			362	
Travel Time (s)		19.2			16.3			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	869	4	0	0	0	0	7	15	4	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	876	0	0	0	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)								8.0		8.0	8.0	
Minimum Split (s)								22.5		22.5	22.5	
Total Split (s)								22.5		22.5	22.5	
Total Split (%)								50.0%		50.0%	50.0%	
Maximum Green (s)								18.0		18.0	18.0	
Yellow Time (s)								3.5		3.5	3.5	
All-Red Time (s)								1.0		1.0	1.0	
Lost Time Adjust (s)								0.0			0.0	
Total Lost Time (s)								4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)								2.0		2.0	2.0	
Recall Mode								None		None	None	
Walk Time (s)								7.0		7.0	7.0	
Flash Don't Walk (s)								10.0		10.0	10.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)								8.0			8.0	
Actuated g/C Ratio								0.18			0.18	
v/c Ratio								0.07			0.11	
Control Delay (s/veh)								11.1			18.8	
Queue Delay								0.0			0.0	
Total Delay (s/veh)								11.1			18.8	
LOS								B			B	
Approach Delay (s/veh)								11.1			18.8	
Approach LOS								B			B	
Queue Length 50th (ft)								2			10	
Queue Length 95th (ft)								15			m18	
Internal Link Dist (ft)								146			282	
Turn Bay Length (ft)												
Base Capacity (vph)								699			727	
Starvation Cap Reductn								0			0	
Spillback Cap Reductn								0			0	
Storage Cap Reductn								0			0	
Reduced v/c Ratio								0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Future Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	1805	3610	0	0	3610
Flt Permitted				0.950				0.340				
Satd. Flow (perm)	0	0	0	1803	1900	1583	0	646	3610	0	0	3610
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						52						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	73	806	70	1	108	438	0	0	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	806	70	0	109	438	0	0	553
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	144
Future Volume (vph)	144
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	117
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	150
Shared Lane Traffic (%)	
Lane Group Flow (vph)	150
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				43.2	43.2	43.2	26.4	26.4	50.4			50.4
Total Split (s)				43.2	43.2	43.2	31.9	31.9	50.4			50.4
Total Split (%)				34.4%	34.4%	34.4%	25.4%	25.4%	40.2%			40.2%
Maximum Green (s)				38.2	38.2	38.2	27.4	27.4	45.9			45.9
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				61.4	61.4	61.4		50.1	45.9			45.9
Actuated g/C Ratio				0.49	0.49	0.49		0.40	0.37			0.37
v/c Ratio				0.08	0.87	0.09		0.37	0.33			0.42
Control Delay (s/veh)				17.5	40.1	6.8		28.8	29.6			31.0
Queue Delay				0.0	0.0	0.0		0.0	0.9			0.0
Total Delay (s/veh)				17.5	40.1	6.8		28.8	30.6			31.0
LOS				B	D	A		C	C			C
Approach Delay (s/veh)					36.0				30.2			26.2
Approach LOS					D				C			C
Queue Length 50th (ft)				31	565	7		52	134			175
Queue Length 95th (ft)				58	#823	33		90	178			227
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				881	929	800		630	1320			1320
Starvation Cap Reductn				0	0	0		0	597			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.08	0.87	0.09		0.17	0.61			0.42

Intersection Summary

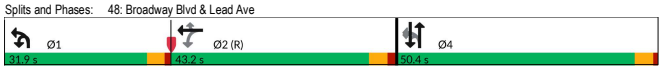
Area Type: Other
Cycle Length: 125.5
Actuated Cycle Length: 125.5
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.23
Control Delay (s/veh)	8.6
Queue Delay	0.0
Total Delay (s/veh)	8.6
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	17
Queue Length 95th (ft)	63
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	649
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.23
Intersection Summary	

Intersection Signal Delay (s/veh): 31.4	Intersection LOS: C
Intersection Capacity Utilization 75.7%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Future Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.98		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	0	1805	3610
Flt Permitted	0.950										0.383	
Satd. Flow (perm)	1796	3610	1576	0	0	0	0	3610	1591	0	727	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			80						64			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			261			421				359
Travel Time (s)		10.8			5.9			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	688	80	0	0	0	0	488	60	2	95	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	688	80	0	0	0	0	488	60	0	97	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7					41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	37.7	37.7	37.7					41.8	41.8		67.8	41.8
Actuated g/C Ratio	0.31	0.31	0.31					0.35	0.35		0.57	0.35
v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.42
Control Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	31.2
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	1.4
Total Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	32.5
LOS	C	D	A					C	A		B	C
Approach Delay (s/veh)		34.1						27.9				29.4
Approach LOS		C						C				C
Queue Length 50th (ft)	28	236	0					148	0		30	164
Queue Length 95th (ft)	59	301	36					196	28		53	215
Internal Link Dist (ft)		395			181			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	564	1134	549					1257	595		639	1257
Starvation Cap Reductn	0	0	0					0	0		0	501
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.70

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 0.61
Intersection Signal Delay (s/veh): 30.9 Intersection LOS: C
Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	113	490
Future Volume (vph)	42	46	513	33	113	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.991
Satd. Flow (prot)	1726	0	1885	0	0	1883
Flt Permitted	0.977					0.991
Satd. Flow (perm)	1726	0	1885	0	0	1883
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	118	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	628
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990			0.974			0.996			0.986	
Flt Protected		0.992			0.990			0.998			0.997	
Satd. Flow (prot)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.992			0.990			0.998			0.997	
Satd. Flow (perm)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5				2		2	2		2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	106	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 36.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.968			0.997			0.997	
Flt Protected		0.998			0.986		0.950			0.950		
Satd. Flow (prot)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.998			0.986		0.950			0.950		
Satd. Flow (perm)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	99	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	87	11	15	15	6	2
Future Volume (vph)	87	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.985				0.966	
Flt Protected	0.957			0.976		
Satd. Flow (prot)	1791	0	0	1854	1835	0
Flt Permitted	0.957			0.976		
Satd. Flow (perm)	1791	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	91	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.7%	ICU Level of Service	A
Analysis Period (min)	15		

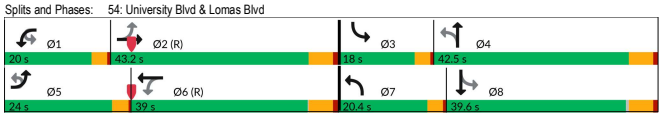
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

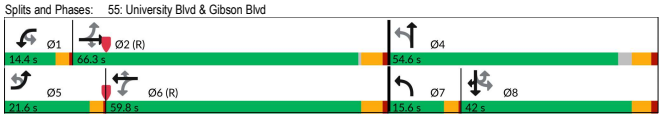
Intersection Summary
Area Type: Other
Cycle Length: 139
Actuated Cycle Length: 139
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay (s/veh): 22.9 Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	411	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	411	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.92			1.00		0.99	0.96		
Frt				0.850			0.993			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3580	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	267	1900	1489	0	500	3580	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	428	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	449	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.93	0.47	0.09		0.68	0.32		0.22	0.80		
Control Delay (s/veh)		924.6	28.1	1.7		102.7	29.2		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		924.6	28.1	1.7		102.7	29.2		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			237.5				35.6			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~238	282	0		35	142		28	193		
Queue Length 95th (ft)		#401	410	12		#104	186		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		54	938	786		69	1407		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.93	0.47	0.09		0.62	0.32		0.18	0.66		

Intersection Summary	
Area Type:	Other
Cycle Length: 134.8	
Actuated Cycle Length: 134.8	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.93	

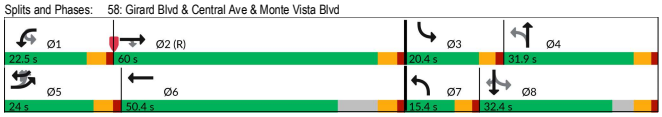
Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 110.2	Intersection LOS: F
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1246	0	0	0
Future Volume (vph)	0	0	1246	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	1298	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1298	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 68.9%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)	1	1		1								4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

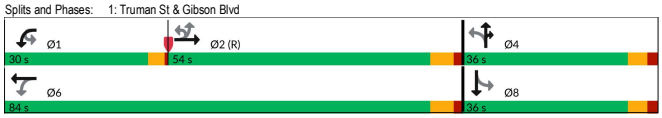
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	
Intersection Summary		

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

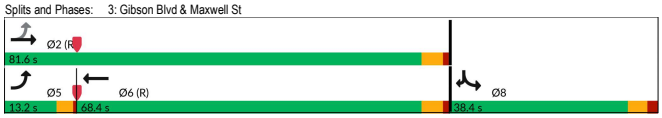
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58

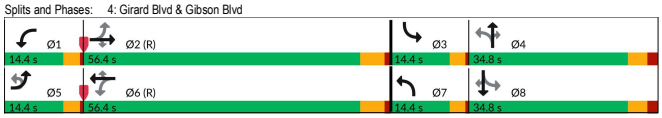
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

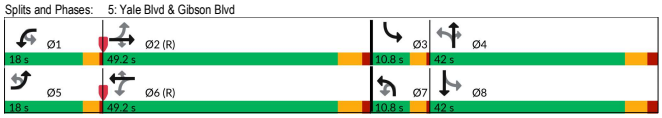
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4	Intersection LOS: C
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

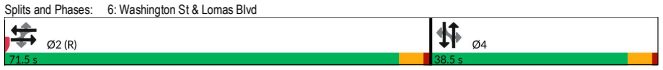
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.4		Intersection LOS: B	
Intersection Capacity Utilization 71.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

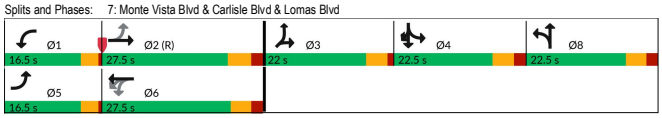
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			350	
Travel Time (s)	17.3			6.8	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary

Area Type: Other
Cycle Length: 111
Actuated Cycle Length: 111
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay (s/veh): 39.1 Intersection LOS: D
Intersection Capacity Utilization 83.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			270	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

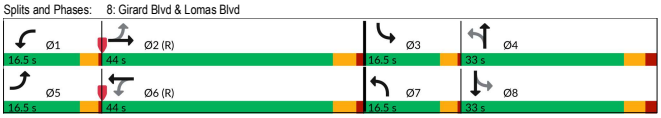
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.4		Intersection LOS: C	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

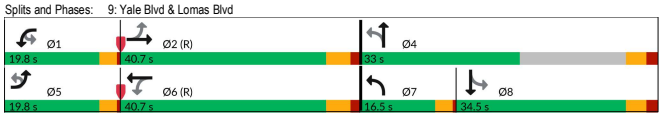
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08

Intersection Summary	

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



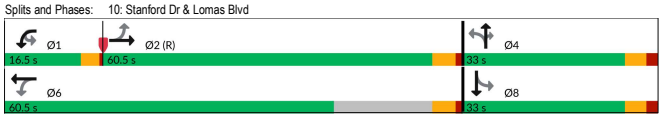
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

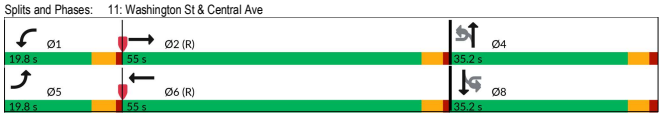
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	78	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	78	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			697			3147
Travel Time (s)		26.6				18.1			15.8			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	83	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	83	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.69	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		72.4	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		72.4	52.4		31.2	42.3
LOS	D	B			D	A		E	D		C	D
Approach Delay (s/veh)		16.5				10.3			59.2			41.2
Approach LOS		B				B			E			D
Queue Length 50th (ft)	18	25			12	56		57	106		12	119
Queue Length 95th (ft)	44	193			33	110		107	166		32	182
Internal Link Dist (ft)		1288				848			617			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.35	0.31		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 30.7		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	308	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	308	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998							0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1900	0	0	1832	0	0
Flt Permitted		0.950				0.950				0.936		
Satd. Flow (perm)	0	1880	1895	0	0	1886	1900	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	328	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	329	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

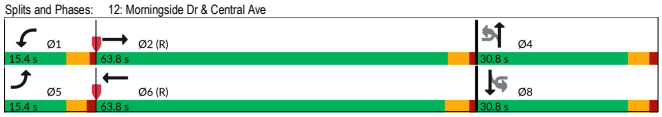
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.21			0.36		
Control Delay (s/veh)		44.9	2.3			60.7	3.0			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			60.7	3.0			49.7		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			4.4				3.5			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m9	142			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1588			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.21			0.12		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.36
Intersection Signal Delay (s/veh): 10.0 Intersection LOS: B
Intersection Capacity Utilization 41.7% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

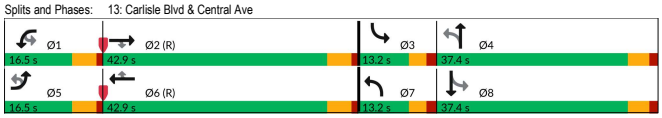
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	295	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	295	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	818	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	314	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	314	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.29	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.5	16.0	0.2		78.9	18.1	0.2	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.5	16.0	0.2		78.9	18.1	0.2	29.0	51.2		30.0
LOS		E	B	A		E	B	A	C	D		C
Approach Delay (s/veh)			21.5				24.5			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		31	85	0	12	123		19
Queue Length 95th (ft)		65	91	1		71	203	1	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.29	0.01	0.09	0.33		0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 33.7		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	309	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	309	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996							0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1900	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1878	1891	0	0	1900	1900	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	329	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	330	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.19			0.17		
Control Delay (s/veh)		52.8	1.8			44.9	1.3			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			44.9	1.3			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				2.8			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			8	0			11		
Queue Length 95th (ft)		25	45			m31	26			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		186	1711			188	1723			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.19			0.05		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.19

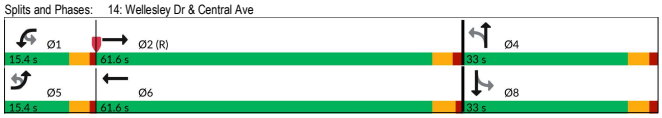
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 5.8	Intersection LOS: A
Intersection Capacity Utilization 37.2%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	295	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	295	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.997			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1893	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1893	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	314	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	321	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

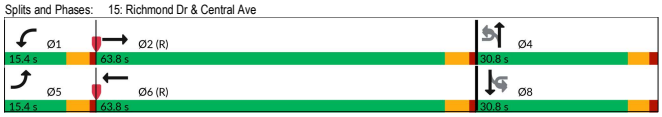
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.19			0.18		
Control Delay (s/veh)		48.6	2.5			44.9	1.0			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			44.9	1.0			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.3			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			7	0			14		
Queue Length 95th (ft)		15	85			27	27			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1721			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.19			0.06		

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.19	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	
Intersection Summary		

Intersection Signal Delay (s/veh): 5.4	Intersection LOS: A
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	366	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	366	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.989			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3563	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1533	3577	0	0	1886	3563	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				11			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	389	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	419	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.15			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.2			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.2			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.0			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	75			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		228	3070			257	2874			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.15			0.03		

Intersection Summary

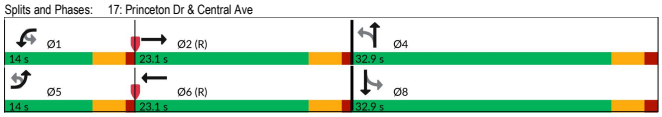
Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.18

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.7		Intersection LOS: A	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	384	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	384	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	409	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	414	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.13			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.3			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	68			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.13			0.04		0.01

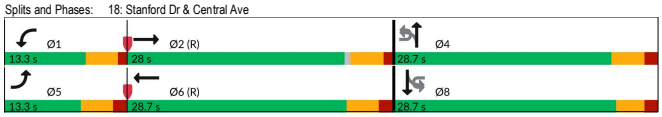
Intersection Summary	
Area Type:	Other
Cycle Length: 70.7	
Actuated Cycle Length: 70.7	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.13	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary	

Intersection Signal Delay (s/veh): 5.1	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



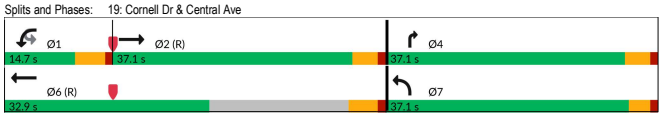
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	363	20	12
Future Volume (vph)	346	31	2	26	363	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	386	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	386	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.12	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				3.7	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	26	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.12	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.0		Intersection LOS: A	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	177	111	271	6	199	19	61	7	12
Future Volume (vph)	1	11	281	177	111	271	6	199	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.942			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3358	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.434			0.744	
Satd. Flow (perm)	0	1711	3358	0	1785	3596	0	816	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			112			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1274			105
Travel Time (s)			32.1			17.0			34.7			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	188	118	288	6	212	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	487	0	118	294	0	212	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	86.9		14.4	100.0		23.6	21.3	21.3	10.9	8.1
Actuated g/C Ratio		0.06	0.62		0.10	0.71		0.17	0.15	0.15	0.08	0.06
v/c Ratio		0.13	0.23		0.63	0.11		0.86	0.07	0.18	0.06	0.18
Control Delay (s/veh)		54.8	9.9		74.9	8.1		84.4	50.4	1.1	45.7	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		54.8	9.9		74.9	8.1		84.4	50.4	1.1	45.7	50.5
LOS		D	A		E	A		F	D	A	D	D
Approach Delay (s/veh)			11.1			27.3			63.9			49.2
Approach LOS			B			C			E			D
Queue Length 50th (ft)		10	76		105	38		175	15	0	5	11
Queue Length 95th (ft)		m28	138		166	81		#280	42	0	19	39
Internal Link Dist (ft)			1332			670			1194			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2127		296	2568		250	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.23		0.40	0.11		0.85	0.04	0.13	0.04	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	

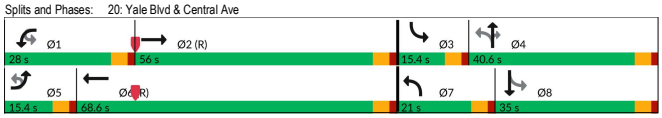
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	

Intersection Signal Delay (s/veh): 30.0	Intersection LOS: C
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	326	19	4	34	328	120	27	372	42	110
Future Volume (vph)	1	26	326	19	4	34	328	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97	0.99		0.98	1.00		0.99
Frt			0.992				0.960			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	3409	0	1805	5095	0	1805
Flt Permitted		0.351				0.222			0.530			0.247
Satd. Flow (perm)	0	663	1883	0	0	407	3409	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				41			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	347	20	4	36	349	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	367	0	0	40	477	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.9			19.8	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.41	0.37			0.70	0.24		0.14	0.69		0.49
Control Delay (s/veh)		73.3	25.2			102.7	15.0		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.3	25.2			102.7	15.0		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.7				21.8			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	204			33	130		20	139		86
Queue Length 95th (ft)		57	355			m67	m160		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		85	981			61	1977		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.34	0.37			0.66	0.24		0.09	0.34		0.38

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.70

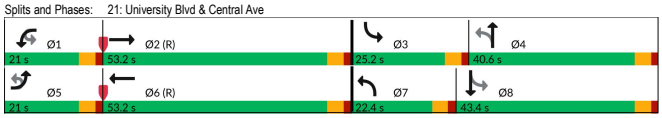
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	

Intersection Summary

Intersection Signal Delay (s/veh): 39.8	Intersection LOS: D
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	342	249	6	56	352	0	73	0	33	0
Future Volume (vph)	3	0	342	249	6	56	352	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.99		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.539				0.486			0.950			
Satd. Flow (perm)	0	1024	1900	1538	0	916	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							694	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	364	265	6	60	374	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	364	265	0	66	374	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

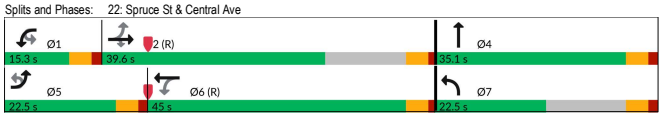
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.27	0.23		0.09	0.25		0.32		0.02	
Control Delay (s/veh)		3.7	8.1	1.4		3.7	5.2		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.1	1.4		3.7	5.2		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			5.3				5.0			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	96	0		10	63		46		0	
Queue Length 95th (ft)		3	148	28		20	144		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		939	1351	1170		810	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.27	0.23		0.08	0.25		0.15		0.02	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 7.5	Intersection LOS: A
Intersection Capacity Utilization 49.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	264	90	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	264	90	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	0.99		1.00	1.00		1.00	0.99
Frt				0.850		0.962			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	1900	1615	1805	3448	0	1805	1853	0	1805	1734
Flt Permitted		0.499			0.557			0.693			0.711	
Satd. Flow (perm)	0	941	1900	1568	1054	3448	0	1314	1853	0	1349	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		59			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			412			375			421			261
Travel Time (s)			9.4			8.5			9.6			5.9
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	281	96	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	13.0%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		70.6	69.2	69.2	66.9	63.5		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.78	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.22	0.01	0.01	0.15		0.22	0.35		0.14	0.43
Control Delay (s/veh)		2.5	3.8	0.0	2.4	4.3		38.7	35.9		36.5	25.1
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.8	0.0	2.4	4.3		38.7	35.9		36.5	25.1
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			3.4			4.3			36.8			27.0
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	35	0	1	26		16	32		10	24
Queue Length 95th (ft)		18	106	0	3	51		41	69		30	68
Internal Link Dist (ft)			332			295			341			181
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		962	1523	1272	919	2554		373	533		382	529
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.22	0.01	0.01	0.15		0.08	0.13		0.05	0.19

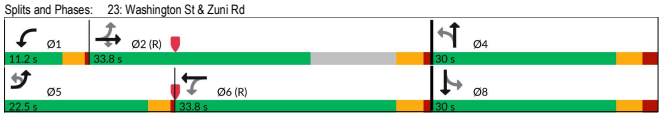
Intersection Summary	
Area Type:	Other
Cycle Length: 86.3	
Actuated Cycle Length: 86.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

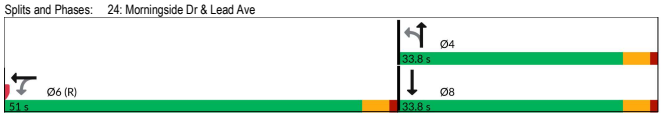


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	375	6	10	12	0	0	11	38
Future Volume (vph)	0	0	0	2	375	6	10	12	0	0	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.896	
Flt Protected								0.978				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1858	0	0	1667	0
Flt Permitted								0.921				
Satd. Flow (perm)	0	0	0	0	1896	0	0	1750	0	0	1667	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	2	399	6	11	13	0	0	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	407	0	0	24	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.39			0.04			0.09	
Control Delay (s/veh)					12.4			18.8			8.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.4			18.8			8.8	
LOS					B			B			A	
Approach Delay (s/veh)					12.4			18.8			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					116			8			4	
Queue Length 95th (ft)					178			25			27	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1040			604			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.39			0.04			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 41.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



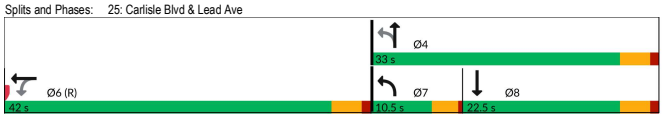
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	402	17	87	149	0	0	161	36
Future Volume (vph)	0	0	0	33	402	17	87	149	0	0	161	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.995						0.975	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1881	0	1805	1900	0	0	1852	0
Flt Permitted					0.996		0.342					
Satd. Flow (perm)	0	0	0	0	1881	0	650	1900	0	0	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	35	428	18	93	159	0	0	171	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	481	0	93	159	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.3		21.7	20.7			12.4	
Actuated g/C Ratio					0.60		0.29	0.28			0.17	
v/c Ratio					0.42		0.33	0.30			0.66	
Control Delay (s/veh)					10.8		12.4	14.9			36.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					10.8		12.4	14.9			36.8	
LOS					B		B	B			D	
Approach Delay (s/veh)					10.8			14.0			36.8	
Approach LOS					B			B			D	
Queue Length 50th (ft)					115		10	23			86	
Queue Length 95th (ft)					215		28	38			141	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1138		295	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.42		0.32	0.22			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 17.4		Intersection LOS: B	

Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Future Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.977						0.979				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1853	0	1805	1900	0
Flt Permitted		0.996								0.371		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1853	0	705	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	338	76	0	0	0	0	214	40	14	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	0	0	0	254	0	14	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

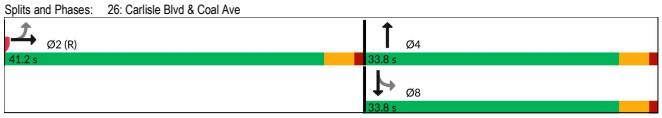
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3		14.3	14.3	
Actuated g/C Ratio		0.69						0.19		0.19	0.19	
v/c Ratio		0.36						0.70		0.10	0.53	
Control Delay (s/veh)		6.3						36.3		41.1	47.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		6.3						36.3		41.1	47.7	
LOS		A						D		D	D	
Approach Delay (s/veh)		6.3						36.3			47.2	
Approach LOS		A						D			D	
Queue Length 50th (ft)		68						105		7	96	
Queue Length 95th (ft)		147						161		m16	160	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1275						733		275	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.36						0.35		0.05	0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 23.8		Intersection LOS: C	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Future Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.890				
Flt Protected		0.999									0.986	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Flt Permitted		0.999									0.986	
Satd. Flow (perm)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			722			657			532	
Travel Time (s)		31.0			16.4			14.9			12.1	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	389	0	0	0	0	0	10	43	4	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	0	0	0	0	53	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

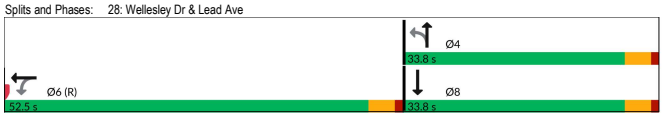
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	569	7	22	16	0	0	11	13
Future Volume (vph)	0	0	0	6	569	7	22	16	0	0	11	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.927	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	1895	0	0	1847	0	0	1730	0
Flt Permitted								0.885				
Satd. Flow (perm)	0	0	0	0	1895	0	0	1682	0	0	1730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	6	605	7	23	17	0	0	12	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	618	0	0	40	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.59			0.07			0.04	
Control Delay (s/veh)					15.4			19.8			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					15.4			19.8			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					15.4			19.8			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					206			15			4	
Queue Length 95th (ft)					306			36			21	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1054			571			596	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.59			0.07			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 15.6		Intersection LOS: B	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

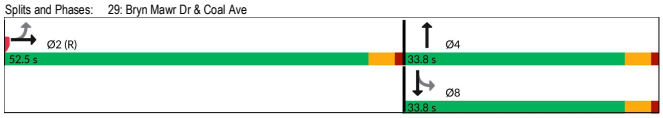


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Future Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.999						0.946				
Flt Protected		0.999									0.976	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1782	0	0	1854	0
Flt Permitted		0.999									0.942	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1782	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	526	6	0	0	0	0	6	4	5	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	0	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	
v/c Ratio		0.52						0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		14.1						15.7			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		14.1						15.7			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		14.1						15.7			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		172						2			4	
Queue Length 95th (ft)		258						13			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1054						607			607	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.02			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 41.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

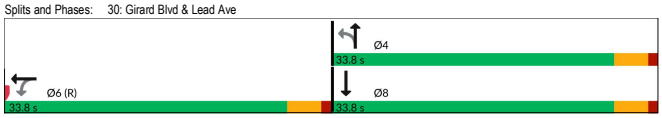


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	321	31	45	132	0	0	96	50
Future Volume (vph)	0	0	0	26	321	31	45	132	0	0	96	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.989						0.954	
Flt Protected					0.997			0.987				
Satd. Flow (prot)	0	0	0	0	1870	0	0	1875	0	0	1799	0
Flt Permitted					0.997			0.874				
Satd. Flow (perm)	0	0	0	0	1870	0	0	1660	0	0	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	28	341	33	48	140	0	0	102	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	402	0	0	188	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.4			12.2			12.2	
Actuated g/C Ratio					0.69			0.18			0.18	
v/c Ratio					0.31			0.63			0.42	
Control Delay (s/veh)					5.6			34.5			19.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					5.6			34.5			19.6	
LOS					A			C			B	
Approach Delay (s/veh)					5.6			34.5			19.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)					52			73			39	
Queue Length 95th (ft)					115			121			79	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1286			719			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.31			0.26			0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

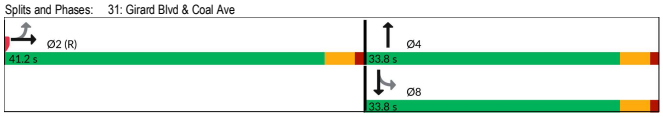


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Future Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993						0.977				
Flt Protected		0.996									0.992	
Satd. Flow (prot)	0	1877	0	0	0	0	0	1849	0	0	1885	0
Flt Permitted		0.996									0.929	
Satd. Flow (perm)	0	1877	0	0	0	0	0	1849	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	423	26	0	0	0	0	148	31	19	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	489	0	0	0	0	0	179	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		54.5						11.5			11.5	
Actuated g/C Ratio		0.73						0.15			0.15	
v/c Ratio		0.36						0.60			0.46	
Control Delay (s/veh)		16.2						35.0			33.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.2						35.0			33.7	
LOS		B						C			C	
Approach Delay (s/veh)		16.2						35.0			33.7	
Approach LOS		B						C			C	
Queue Length 50th (ft)		205						71			54	
Queue Length 95th (ft)		313						122			95	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1366						732			689	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.36						0.24			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave

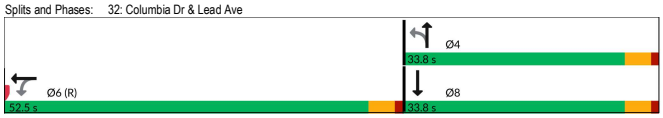


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	721	15	21	8	0	0	7	21
Future Volume (vph)	0	0	0	15	721	15	21	8	0	0	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.898	
Flt Protected					0.999			0.966				
Satd. Flow (prot)	0	0	0	0	1892	0	0	1835	0	0	1706	0
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	1892	0	0	1644	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	767	16	22	9	0	0	7	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	799	0	0	31	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.76			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					20.6			19.7			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.6			19.7			10.2	
LOS					C			B			B	
Approach Delay (s/veh)					20.6			19.7			10.2	
Approach LOS					C			B			B	
Queue Length 50th (ft)					310			11			3	
Queue Length 95th (ft)					464			30			20	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			558			593	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.76			0.06			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 32: Columbia Dr & Lead Ave

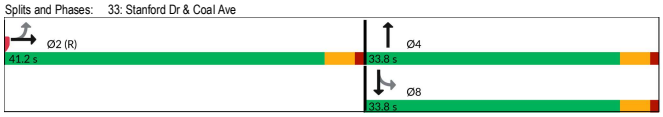


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Future Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.998						0.907				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	1892	0	0	0	0	0	1688	0	0	1849	0
Flt Permitted		0.998									0.939	
Satd. Flow (perm)	0	1892	0	0	0	0	0	1688	0	0	1782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						9				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	507	6	0	0	0	0	4	9	5	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	532	0	0	0	0	0	13	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.57						0.02			0.01	
Control Delay (s/veh)		16.7						9.7			14.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.7						9.7			14.1	
LOS		B						A			B	
Approach Delay (s/veh)		16.7						9.7			14.1	
Approach LOS		B						A			B	
Queue Length 50th (ft)		166						1			3	
Queue Length 95th (ft)		258						11			11	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		926						664			696	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.57						0.02			0.01	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.57
Intersection Signal Delay (s/veh): 16.5 Intersection LOS: B
Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave

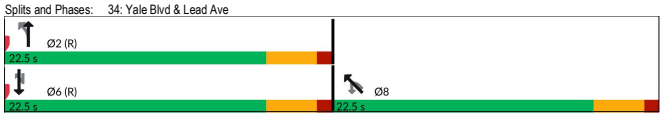


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	67	104	0	0	71	90	0	0	0	88	597	15
Future Volume (vph)	67	104	0	0	71	90	0	0	0	88	597	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.996	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1855	0
Flt Permitted	0.708									0.950		
Satd. Flow (perm)	1319	1863	0	0	1863	1583	0	0	0	1770	1855	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						96					3	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			111			172	
Travel Time (s)		23.2			29.0			2.5			3.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	71	111	0	0	76	96	0	0	0	94	635	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	111	0	0	76	96	0	0	0	94	651	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.13	0.15			0.10	0.14				0.13	0.88	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.3	5.2			9.0	3.2				9.2	29.5	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.3	5.2			9.0	3.2				9.2	29.5	
LOS	A	A			A	A				A	C	
Approach Delay (s/veh)		5.2			5.7						26.9	
Approach LOS		A			A						C	
Queue Length 50th (ft)	5	8			12	0				15	146	
Queue Length 95th (ft)	13	18			30	19				35	#319	
Internal Link Dist (ft)		772			1194			31			92	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	527	745			745	690				708	743	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.13	0.15			0.10	0.14				0.13	0.88	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.88
Intersection Signal Delay (s/veh): 20.0 Intersection LOS: C
Intersection Capacity Utilization 53.3% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 34: Yale Blvd & Lead Ave



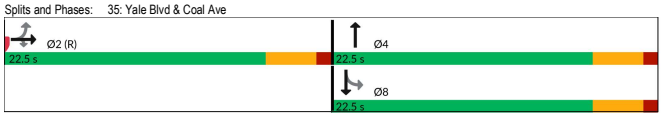
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Future Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98							1.00		
Frt			0.850					0.937				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1780	0	1805	1900	0
Flt Permitted	0.950									0.438		
Satd. Flow (perm)	1805	1900	1577	0	0	0	0	1780	0	831	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76					117				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	333	76	0	0	0	0	165	145	15	157	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	333	76	0	0	0	0	310	0	15	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	25.0	25.0	25.0					11.0		11.0	11.0	
Actuated g/C Ratio	0.56	0.56	0.56					0.24		0.24	0.24	
v/c Ratio	0.03	0.32	0.08					0.59		0.07	0.34	
Control Delay (s/veh)	6.1	7.4	2.5					13.5		14.5	17.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	6.1	7.4	2.5					13.5		14.5	17.2	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		6.5						13.5			17.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)	3	38	0					43		3	30	
Queue Length 95th (ft)	13	98	15					83		11	82	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	1002	1054	909					782		332	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.03	0.32	0.08					0.40		0.05	0.21	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 35: Yale Blvd & Coal Ave

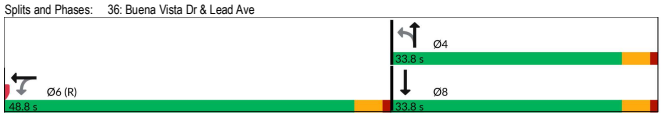


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	673	4	30	4	0	0	6	11
Future Volume (vph)	0	0	0	16	673	4	30	4	0	0	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.999						0.910	
Flt Protected					0.999			0.957				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1818	0	0	1729	0
Flt Permitted					0.999			0.826				
Satd. Flow (perm)	0	0	0	0	1896	0	0	1569	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7				3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	17	716	4	32	4	0	0	6	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	737	0	0	36	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.72			0.06			0.03	
Control Delay (s/veh)					19.7			18.1			11.3	
Queue Delay					0.5			0.0			0.0	
Total Delay (s/veh)					20.2			18.1			11.3	
LOS					C			B			B	
Approach Delay (s/veh)					20.2			18.1			11.3	
Approach LOS					C			B			B	
Queue Length 50th (ft)					270			12			2	
Queue Length 95th (ft)					408			32			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1017			556			621	
Starvation Cap Reductn					58			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.77			0.06			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 19.9		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

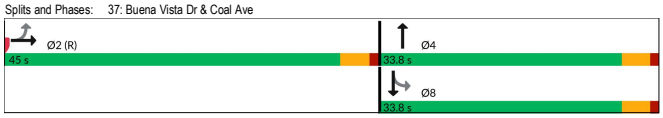


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	337	52	0	0	0	0	20	6	9	19	0
Future Volume (vph)	23	337	52	0	0	0	0	20	6	9	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.99			1.00	
Frt		0.983						0.970				
Flt Protected		0.997									0.984	
Satd. Flow (prot)	0	1853	0	0	0	0	0	1833	0	0	1870	0
Flt Permitted		0.997									0.878	
Satd. Flow (perm)	0	1852	0	0	0	0	0	1833	0	0	1663	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	24	359	55	0	0	0	0	21	6	10	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	438	0	0	0	0	0	27	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		72.0						8.0			8.0	
Actuated g/C Ratio		0.91						0.10			0.10	
v/c Ratio		0.26						0.14			0.18	
Control Delay (s/veh)		1.7						29.1			35.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.7						29.1			35.2	
LOS		A						C			D	
Approach Delay (s/veh)		1.7						29.1			35.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						10			14	
Queue Length 95th (ft)		67						33			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1693						685			618	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.26						0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 5.2		Intersection LOS: A	
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	50	553	106	32	203	0	0	256	51
Future Volume (vph)	0	0	0	50	553	106	32	203	0	0	256	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850					0.975	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1892	1615	1805	5187	0	0	5057	0
Flt Permitted					0.996		0.481					
Satd. Flow (perm)	0	0	0	0	1892	1589	914	5187	0	0	5057	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						92					52	
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		48.6			22.7			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	53	588	113	34	216	0	0	272	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	641	113	34	216	0	0	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

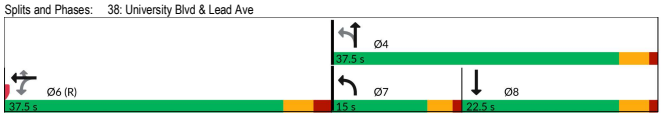
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6		6	4					
Detector Phase				6	6	6	7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0			8.0	
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%			30.0%	
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0			18.0	
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5			3.5	
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)					5.5	5.5	4.0	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	Max			Max	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				23.0	23.0	23.0		10.0			10.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)					32.0	32.0	33.5	33.0			29.1	
Actuated g/C Ratio					0.43	0.43	0.45	0.44			0.39	
v/c Ratio					0.79	0.15	0.07	0.09			0.16	
Control Delay (s/veh)					27.8	5.0	12.2	12.4			13.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)					27.8	5.0	12.2	12.4			13.8	
LOS					C	A	B	B			B	
Approach Delay (s/veh)					24.4			12.4			13.8	
Approach LOS					C			B			B	
Queue Length 50th (ft)					249	5	9	20			26	
Queue Length 95th (ft)					#428	33	23	33			54	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					807	730	538	2282			1996	
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.79	0.15	0.06	0.09			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	

Intersection Signal Delay (s/veh): 19.5		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



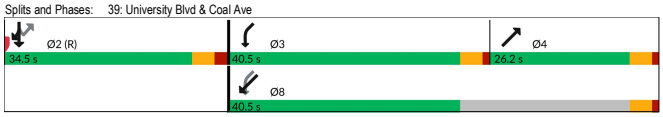
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	39	323	102	0	203	68	50	245	0
Future Volume (vph)	0	0	0	39	323	102	0	203	68	50	245	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.97	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.564		
Satd. Flow (perm)	0	0	0	1802	1900	1615	0	5187	1567	1070	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						92			124			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	344	109	0	216	72	53	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	41	344	109	0	216	72	53	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		3.0	8.0	
Minimum Split (s)				44.5	44.5	44.5		26.5		26.5	40.5	
Total Split (s)				34.5	34.5	34.5		26.2		40.5	40.5	
Total Split (%)				34.1%	34.1%	34.1%		25.9%		40.0%	40.0%	
Maximum Green (s)				29.0	29.0	29.0		21.7		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				2.0	2.0	2.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				5.5	5.5	5.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		1.5	2.0	
Recall Mode				C-Max	C-Max	C-Max		None		None	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		0.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		10.0		0.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				29.0	29.0	29.0		54.2	101.2	62.2	62.2	
Actuated g/C Ratio				0.29	0.29	0.29		0.54	1.00	0.61	0.61	
v/c Ratio				0.08	0.63	0.21		0.08	0.05	0.08	0.08	
Control Delay (s/veh)				27.0	37.6	9.0		12.1	0.1	8.1	8.0	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				27.0	37.6	9.0		12.1	0.1	8.1	8.0	
LOS				C	D	A		B	A	A	A	
Approach Delay (s/veh)					30.4			9.1			8.0	
Approach LOS					C			A			A	
Queue Length 50th (ft)				19	193	8		24	0	13	23	
Queue Length 95th (ft)				46	290	48		38	0	27	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				516	544	528		2779	1567	919	3188	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.08	0.63	0.21		0.08	0.05	0.06	0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	

Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave



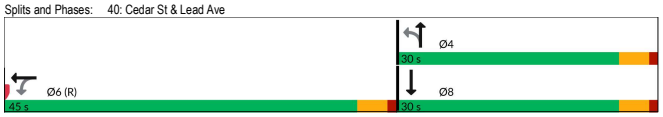
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	654	39	9	168	0	0	14	111
Future Volume (vph)	0	0	0	17	654	39	9	168	0	0	14	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.993						0.880	
Flt Protected					0.999			0.997				
Satd. Flow (prot)	0	0	0	0	1882	0	0	1894	0	0	1636	0
Flt Permitted					0.999			0.981				
Satd. Flow (perm)	0	0	0	0	1882	0	0	1864	0	0	1636	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)				1		1			1			1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	696	41	10	179	0	0	15	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	755	0	0	189	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.8			12.2			12.2	
Actuated g/C Ratio					0.72			0.16			0.16	
v/c Ratio					0.56			0.63			0.37	
Control Delay (s/veh)					10.2			38.1			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.2			38.1			9.9	
LOS					B			D			A	
Approach Delay (s/veh)					10.2			38.1			9.9	
Approach LOS					B			D			A	
Queue Length 50th (ft)					175			83			6	
Queue Length 95th (ft)					m286			135			47	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1352			633			634	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.56			0.30			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 15.1		Intersection LOS: B	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave

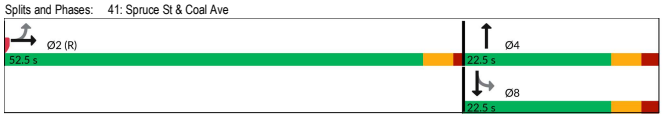


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	515	3	0	0	0	0	3	2	5	7	0
Future Volume (vph)	26	515	3	0	0	0	0	3	2	5	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.946				
Flt Protected		0.998									0.980	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1780	0	0	1862	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	1894	0	0	0	0	0	1780	0	0	1897	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	548	3	0	0	0	0	3	2	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	579	0	0	0	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.32						0.03			0.06	
Control Delay (s/veh)		1.5						26.2			31.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.5						26.2			31.0	
LOS		A						C			C	
Approach Delay (s/veh)		1.5						26.2			31.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			5	
Queue Length 95th (ft)		108						11			20	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1803						405			429	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.32						0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



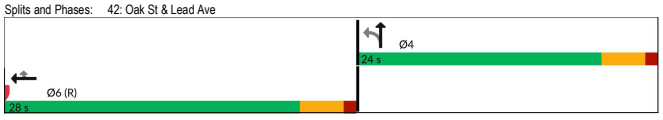
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	308	489	99	585	0	0	0	0
Future Volume (vph)	0	0	0	0	308	489	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						122	105					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	328	520	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	328	520	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					28.8	28.8	14.2	14.2				
Actuated g/C Ratio					0.55	0.55	0.27	0.27				
v/c Ratio					0.31	0.56	0.18	0.63				
Control Delay (s/veh)					8.3	9.4	4.1	19.1				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					8.3	9.4	4.1	19.1				
LOS					A	A	A	B				
Approach Delay (s/veh)					9.0			16.9				
Approach LOS					A			B				
Queue Length 50th (ft)					48	63	0	87				
Queue Length 95th (ft)					110	173	23	112				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1052	933	742	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.31	0.56	0.14	0.46				

Intersection Summary			
Area Type:	Other		
Cycle Length: 52			
Actuated Cycle Length: 52			
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	407	748	0	0	0	0	0	283	110	0	0	0
Future Volume (vph)	407	748	0	0	0	0	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								0.99				
Frt								0.958				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4940	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	363							77				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	433	796	0	0	0	0	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	433	796	0	0	0	0	0	418	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	24.9	24.9						10.1				
Actuated g/C Ratio	0.55	0.55						0.22				
v/c Ratio	0.37	0.76						0.36				
Control Delay (s/veh)	2.3	14.5						12.9				
Queue Delay	0.0	2.0						0.0				
Total Delay (s/veh)	2.3	16.5						12.9				
LOS	A	B						B				
Approach Delay (s/veh)		11.5						12.9				
Approach LOS		B						B				
Queue Length 50th (ft)	7	134						27				
Queue Length 95th (ft)	37	#327						46				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1161	1051						1914				
Starvation Cap Reductn	0	132						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.37	0.87						0.22				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	

Intersection Signal Delay (s/veh): 11.8	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 43: Oak St & Coal Ave

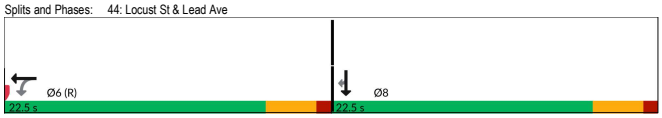
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	314	0	0	0	0	0	533	541
Future Volume (vph)	0	0	0	70	314	0	0	0	0	0	533	541
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.957	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	1900	0	0	0	0	0	3309	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	1900	0	0	0	0	0	3309	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				74							143	351
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	74	334	0	0	0	0	0	567	576
Shared Lane Traffic (%)												39%
Lane Group Flow (vph)	0	0	0	74	334	0	0	0	0	0	792	351
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				CI+Ex	CI+Ex						CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					CI+Ex						CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				19.9	19.9						16.1	16.1
Actuated g/C Ratio				0.44	0.44						0.36	0.36
v/c Ratio				0.09	0.40						0.62	0.47
Control Delay (s/veh)				3.2	11.2						11.6	3.8
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				3.2	11.2						11.6	3.8
LOS				A	B						B	A
Approach Delay (s/veh)					9.7						9.2	
Approach LOS					A						A	
Queue Length 50th (ft)				0	59						64	0
Queue Length 95th (ft)				17	111						107	39
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				838	839						1409	798
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.40						0.56	0.44

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 9.3	Intersection LOS: A

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	711	59	0	0	0	0	0	0	448	88	0
Future Volume (vph)	0	711	59	0	0	0	0	0	0	448	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98							1.00	1.00	
Frt			0.850									
Flt Protected										0.950	0.965	
Satd. Flow (prot)	0	1900	1583	0	0	0	0	0	0	1643	3337	0
Flt Permitted										0.950	0.965	
Satd. Flow (perm)	0	1900	1557	0	0	0	0	0	0	1640	3333	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			50							110	110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	756	63	0	0	0	0	0	0	477	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	756	63	0	0	0	0	0	0	238	333	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

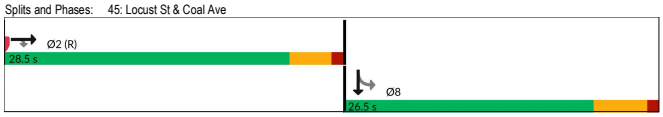
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		33.3	33.3							11.7	11.7	
Actuated g/C Ratio		0.61	0.61							0.21	0.21	
v/c Ratio		0.66	0.07							0.55	0.42	
Control Delay (s/veh)		11.8	2.8							15.2	13.5	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		11.8	2.8							15.2	13.5	
LOS		B	A							B	B	
Approach Delay (s/veh)		11.1									14.2	
Approach LOS		B									B	
Queue Length 50th (ft)		123	1							41	35	
Queue Length 95th (ft)		#317	15							89	58	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1150	962							694	1340	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.66	0.07							0.34	0.25	

Intersection Summary	
Area Type:	Other
Cycle Length: 55	
Actuated Cycle Length: 55	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Intersection Signal Delay (s/veh): 12.4	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 45: Locust St & Coal Ave



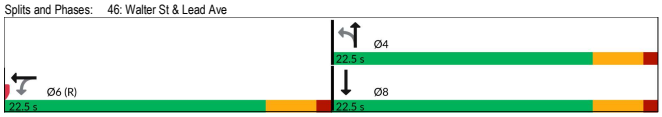
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Future Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.923	
Flt Protected					0.999			0.964				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1832	0	0	1731	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1896	0	0	1900	0	0	1731	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2			2			2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	22	932	6	14	5	0	0	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	960	0	0	19	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.55			0.06			0.02	
Control Delay (s/veh)					4.9			19.4			12.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					4.9			19.4			12.6	
LOS					A			B			B	
Approach Delay (s/veh)					4.9			19.4			12.6	
Approach LOS					A			B			B	
Queue Length 50th (ft)					0			4			1	
Queue Length 95th (ft)					#404			m17			8	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					1753			760			694	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.55			0.03			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 5.2		Intersection LOS: A	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



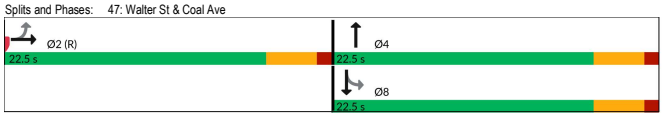
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Future Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.890				
Flt Protected											0.985	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1658	0	0	1872	0
Flt Permitted												
Satd. Flow (perm)	0	1898	0	0	0	0	0	1658	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						27				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		827			715			226			362	
Travel Time (s)		18.8			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	651	4	0	0	0	0	6	27	4	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	0	0	0	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.37						0.10			0.04	
Control Delay (s/veh)		2.5						9.5			15.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.5						9.5			15.3	
LOS		A						A			B	
Approach Delay (s/veh)		2.5						9.5			15.3	
Approach LOS		A						A			B	
Queue Length 50th (ft)		0						1			3	
Queue Length 95th (ft)		140						18			m6	
Internal Link Dist (ft)		747			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1755						679			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.37						0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 3.0		Intersection LOS: A	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Future Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1881	1615	0	1805	3610	0	0	3574
Flt Permitted				0.950				0.480				
Satd. Flow (perm)	0	0	0	1801	1881	1583	0	912	3610	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						60						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	0	0	43	769	129	2	69	526	0	0	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	43	769	129	0	71	526	0	0	350
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex			CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					CI+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	79
Future Volume (vph)	79
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1588
Right Turn on Red	Yes
Satd. Flow (RTOR)	84
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	84
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (%)				35.0%	35.0%	35.0%	29.0%	29.0%	36.0%			36.0%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	35.1			35.1
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		39.2	35.1			35.1
Actuated g/C Ratio				0.53	0.53	0.53		0.36	0.32			0.32
v/c Ratio				0.04	0.77	0.15		0.20	0.46			0.31
Control Delay (s/veh)				13.5	27.6	8.1		5.9	11.1			29.2
Queue Delay				0.0	0.0	0.0		0.0	0.1			0.0
Total Delay (s/veh)				13.5	27.6	8.1		5.9	11.3			29.2
LOS				B	C	A		A	B			C
Approach Delay (s/veh)					24.3				10.6			24.8
Approach LOS					C				B			C
Queue Length 50th (ft)				15	426	24		7	43			97
Queue Length 95th (ft)				33	602	55		13	55			137
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				956	999	869		740	1151			1140
Starvation Cap Reductn				0	0	0		0	109			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.04	0.77	0.15		0.10	0.50			0.31

Intersection Summary

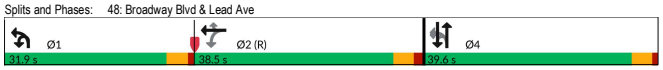
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.15
Control Delay (s/veh)	6.5
Queue Delay	0.0
Total Delay (s/veh)	6.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	35
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	563
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Future Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		200	0		0	0		130	100		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.97						0.99			
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	1787	3610	0
Flt Permitted	0.950									0.359		
Satd. Flow (perm)	1790	3610	1573	0	0	0	0	3610	1595	675	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64						69			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		475			277			421			359	
Travel Time (s)		10.8			6.3			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		2						4		1	4	
Permitted Phases	2		2						4	4		
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	39.0%	
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	37.9	
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	7.0	
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9	61.4	37.9	
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34	0.56	0.34	
v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	
Control Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
LOS	C	C	A					C	A	A	A	
Approach Delay (s/veh)		29.6						26.4			6.9	
Approach LOS		C						C			A	
Queue Length 50th (ft)	34	159	0					148	0	4	20	
Queue Length 95th (ft)	69	211	30					198	30	16	28	
Internal Link Dist (ft)		395			197			341			279	
Turn Bay Length (ft)	100		200						130	100		
Base Capacity (vph)	554	1119	531					1243	594	609	1243	
Starvation Cap Reductn	0	0	0					0	0	0	0	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	43	244
Future Volume (vph)	24	34	1	363	9	43	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.993
Satd. Flow (prot)	1715	0	0	1894	0	0	1887
Flt Permitted	0.979						0.993
Satd. Flow (perm)	1715	0	0	1894	0	0	1887
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	46	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	306
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.971			0.996			0.995	
Flt Protected		0.993			0.989			0.997			0.998	
Satd. Flow (prot)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.993			0.989			0.997			0.998	
Satd. Flow (perm)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	43	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.972			0.975			0.998			0.998	
Flt Protected		0.994			0.978		0.950			0.950		
Satd. Flow (prot)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.994			0.978		0.950			0.950		
Satd. Flow (perm)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2						2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	43	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	7	12	11	7	1
Future Volume (vph)	35	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.983	
Flt Protected	0.960			0.975		
Satd. Flow (prot)	1786	0	0	1852	1868	0
Flt Permitted	0.960			0.975		
Satd. Flow (perm)	1786	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	37	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

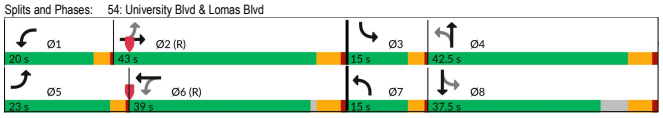
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

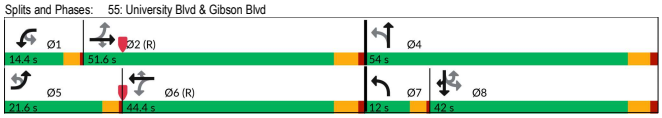
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 20.3	Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	267	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	267	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.991			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3573	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3573	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	284	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	302	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.24		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	27.1		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	27.1		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.4			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	83		17	161			16
Queue Length 95th (ft)		#219	161	0	33	118		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1275		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.24		0.11	0.54			0.12

Intersection Summary

Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

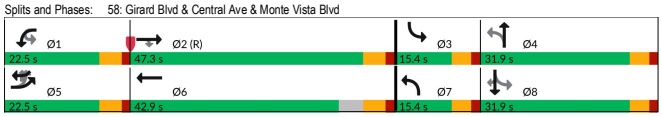
Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

Intersection Signal Delay (s/veh): 52.9	Intersection LOS: D
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	774	0	0	0
Future Volume (vph)	0	0	774	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	823	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	823	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

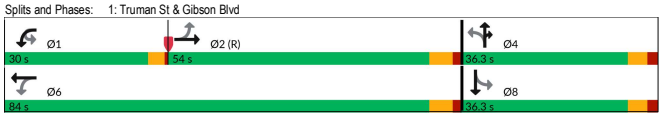
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

Intersection Summary	
Area Type:	Other
Cycle Length: 120.3	
Actuated Cycle Length: 120.3	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	

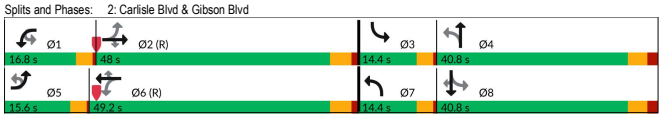
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary

Intersection Signal Delay (s/veh): 5.5	Intersection LOS: A
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



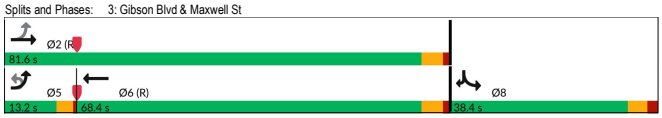
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay (s/veh): 3.3	Intersection LOS: A

Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

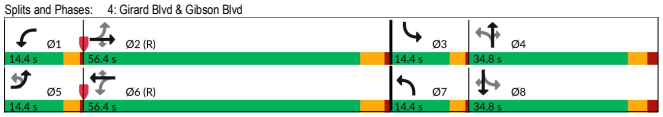
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123.3	
Actuated Cycle Length: 123.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	

Intersection Summary	

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

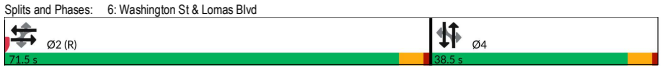
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.0		Intersection LOS: B	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



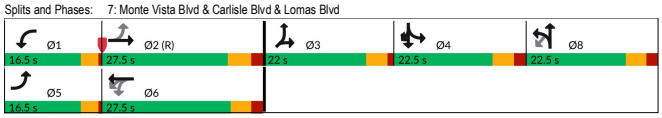
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	

Intersection Summary

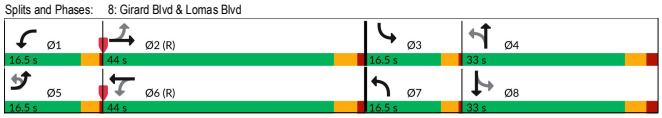
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

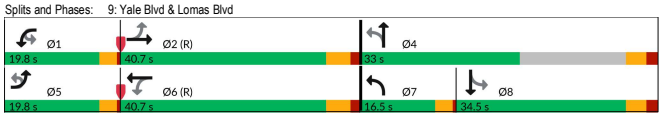
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09
Intersection Summary		

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



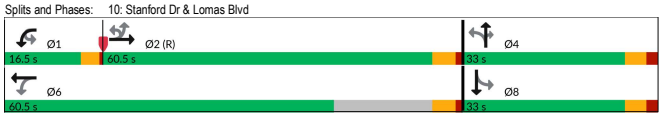
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)		7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)		17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)		0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	107	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	107	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.379			0.362
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	717	1851	0	678
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			698		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	109	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	109	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.5			15.9	75.1		18.5	18.5		18.5
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.37		1.00	0.69		0.21
Control Delay (s/veh)		77.1	15.4			79.8	15.5		135.7	58.4		47.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.4			79.8	15.5		135.7	58.4		47.2
LOS		E	B			E	B		F	E		D
Approach Delay (s/veh)			20.6				21.0			85.6		
Approach LOS			C				C			F		
Queue Length 50th (ft)		27	146			30	160		~88	145		15
Queue Length 95th (ft)		61	289			66	317		#171	210		39
Internal Link Dist (ft)			1288				848			618		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1159			78	1170		244	635		230
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.37		0.45	0.32		0.10

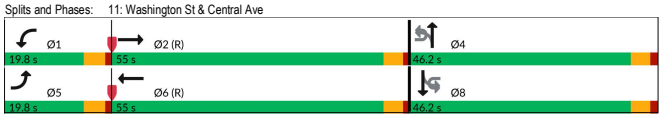
Intersection Summary
Area Type: Other
Cycle Length: 121
Actuated Cycle Length: 121
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay (s/veh): 40.3 Intersection LOS: D
Intersection Capacity Utilization 62.1% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.5	
Actuated g/C Ratio	0.15	
v/c Ratio	0.67	
Control Delay (s/veh)	57.0	
Queue Delay	0.0	
Total Delay (s/veh)	57.0	
LOS	E	
Approach Delay (s/veh)	56.0	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	203	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



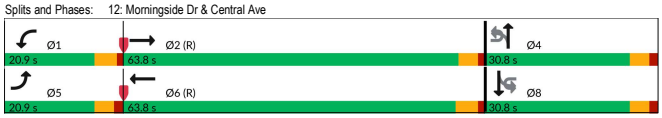
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	520	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	520	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.999			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1898	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	701	1888	0	0	1347	1898	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	531	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	536	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.38			0.32		
Control Delay (s/veh)		57.4	5.8			49.1	9.6			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.4	5.8			49.1	9.6			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.8			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	161			22		
Queue Length 95th (ft)		52	191			32	314			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1419			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.38			0.11		

Intersection Summary			
Area Type:	Other		
Cycle Length: 115.5			
Actuated Cycle Length: 115.5			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 13.9		Intersection LOS: B	
Intersection Capacity Utilization 45.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	484	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	484	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.150				0.305			0.395			0.409
Satd. Flow (perm)	0	279	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	494	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	494	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

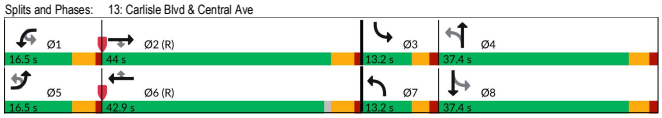
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.6	55.9	55.9		14.6	41.4	41.4	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.35	0.35	0.05		0.67	0.70	0.07	0.18	0.62		0.23
Control Delay (s/veh)		264.1	22.7	0.1		84.2	36.8	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		264.1	22.7	0.1		84.2	36.8	0.2	28.8	49.4		30.0
LOS		F	C	A		F	D	A	C	D		C
Approach Delay (s/veh)			66.9				37.9			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	307	0	22	122		31
Queue Length 95th (ft)		#202	278	0		#84	435	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		66	955	825		79	707	653	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.35	0.35	0.05		0.63	0.70	0.07	0.16	0.35		0.22

Intersection Summary			
Area Type:	Other		
Cycle Length: 111.1			
Actuated Cycle Length: 111.1			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay (s/veh): 48.9		Intersection LOS: D	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	
Intersection Summary		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	549	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	549	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.995			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1879	0	0	1749	0	0
Flt Permitted		0.667				0.588				0.912		
Satd. Flow (perm)	0	1242	1877	0	0	1022	1879	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	560	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	580	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.37			0.26		
Control Delay (s/veh)		53.3	3.8			49.5	6.5			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.3	3.8			49.5	6.5			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				8.1			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	70			16		
Queue Length 95th (ft)		41	96			39	298			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		170	1548			143	1561			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.37			0.09		

Intersection Summary

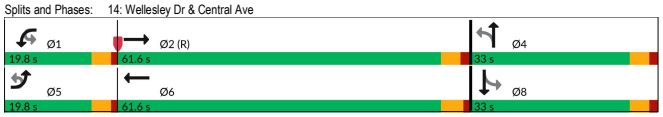
Area Type: Other
Cycle Length: 114.4
Actuated Cycle Length: 114.4
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Intersection Signal Delay (s/veh): 9.4		Intersection LOS: A	
Intersection Capacity Utilization 58.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	488	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	488	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1877	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1178	1879	0	0	853	1877	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	498	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	505	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.34			0.41		
Control Delay (s/veh)		49.1	7.8			64.1	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.1	7.8			64.1	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				6.5			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			20	42			23		
Queue Length 95th (ft)		36	253			52	79			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1502			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.34			0.14		

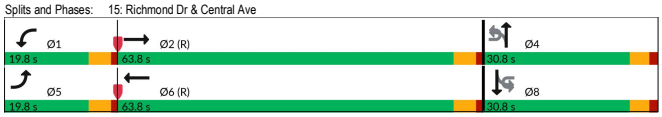
Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	

Intersection Summary	

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	653	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	653	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.996			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3585	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3585	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				3			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	666	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	686	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.33			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	15.3			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	15.3			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.7			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	134			16		
Queue Length 95th (ft)		#99	81			73	228			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2070			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.33			0.10		

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	

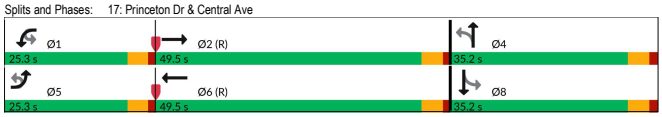
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	

Intersection Summary

Intersection Signal Delay (s/veh): 20.0	Intersection LOS: C
Intersection Capacity Utilization 49.2%	ICU Level of Service A
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	651	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	651	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	664	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	669	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.23			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.0	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.0	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.1			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	35			10		5
Queue Length 95th (ft)		43	154			m67	46			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.23			0.08		0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

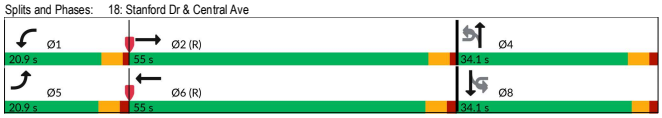
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary	

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	643	55	49
Future Volume (vph)	1	587	131	4	59	643	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	656	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	656	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

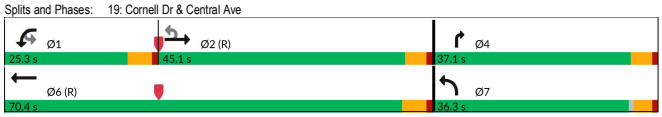
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.21	0.38	0.28
Control Delay (s/veh)		17.1			123.8	2.0	53.2	16.8
Queue Delay		0.0			0.0	0.4	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.3	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				13.1	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	34	37	0
Queue Length 95th (ft)		250			#113	56	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1800	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.50	0.10	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 107.5	
Actuated Cycle Length: 107.5	
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	

Intersection Signal Delay (s/veh): 16.5	Intersection LOS: B
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	173	13	124	498	9	231	23	87	12
Future Volume (vph)	4	11	582	173	13	124	498	9	231	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.97				1.00		0.99		0.97	0.99
Frt			0.966				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3382	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.080			0.405			0.742
Satd. Flow (perm)	0	1466	3382	0	0	152	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			31				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1282		
Travel Time (s)			32.1				17.0			35.0		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	177	13	127	508	9	236	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	771	0	0	140	517	0	236	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			50.0	99.2		24.0	19.2	19.2	11.3
Actuated g/C Ratio		0.06	0.36			0.36	0.71		0.17	0.14	0.14	0.08
v/c Ratio		0.16	0.62			2.59	0.20		0.95	0.09	0.27	0.09
Control Delay (s/veh)		52.1	42.6			796.9	9.0		99.3	53.7	4.2	47.1
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		52.1	42.6			796.9	9.0		99.3	53.7	4.2	47.1
LOS		D	D			F	A		F	D	A	D
Approach Delay (s/veh)			42.8				176.9			72.0		
Approach LOS			D				F			E		
Queue Length 50th (ft)		11	249			~218	72		198	17	0	9
Queue Length 95th (ft)		m16	m340			#324	148		#278	47	16	27
Internal Link Dist (ft)			1332				670			1202		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1251			54	2542		250	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.62			2.59	0.20		0.94	0.05	0.18	0.07

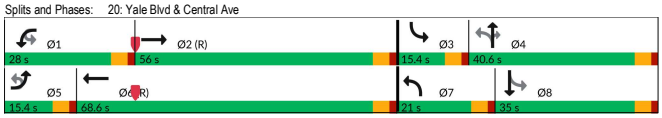
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.59	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.0	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	
Intersection Summary		

Intersection Signal Delay (s/veh): 96.8	Intersection LOS: F
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	458	18	20	46	488	213	1	32	283	80
Future Volume (vph)	15	49	458	18	20	46	488	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.98	0.99			0.94	0.99	
Frt			0.994				0.954				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1887	0	0	1805	3396	0	0	1805	4971	0
Flt Permitted		0.116				0.109				0.503		
Satd. Flow (perm)	0	220	1887	0	0	202	3396	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				54				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	467	18	20	47	498	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	485	0	0	67	715	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	49.3			36.6	51.4			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.73			1.29	0.56			0.18	0.66	
Control Delay (s/veh)		236.4	47.1			254.5	34.4			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		236.4	47.1			254.5	34.4			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.5				53.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	378			~80	248			23	104	
Queue Length 95th (ft)		#175	525			m#155	m192			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	665			52	1280			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.73			1.29	0.56			0.11	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	

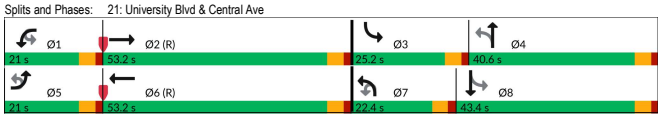
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 57.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	457	168	11	69	536	0	111	0	71	0
Future Volume (vph)	3	0	457	168	11	69	536	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.426				0.408			0.950			
Satd. Flow (perm)	0	809	1900	1563	0	775	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							677	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	466	171	11	70	547	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	466	171	0	81	547	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.37	0.16		0.13	0.39		0.40		0.05	
Control Delay (s/veh)		3.7	9.6	1.5		3.9	6.8		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	9.6	1.5		3.9	6.8		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			7.4				6.4			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	134	0		12	104		67		0	
Queue Length 95th (ft)		3	201	23		23	231		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		773	1251	1088		700	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.37	0.16		0.12	0.39		0.21		0.05	

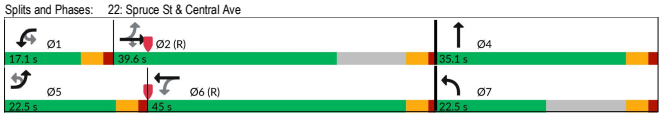
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary	

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	473	25	1	19	321	127	35	54	9	60
Future Volume (vph)	5	109	473	25	1	19	321	127	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300		100		0	100		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		1.00	0.99		1.00	1.00		1.00
Frt				0.850			0.957			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1803	1900	1615	0	1803	3427	0	1805	1853	0	1805
Flt Permitted		0.462				0.473			0.484			0.715
Satd. Flow (perm)	0	874	1900	1566	0	896	3427	0	918	1853	0	1357
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				76			74			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			380				354			333		
Travel Time (s)			8.6				8.0			7.6		
Confl. Peds. (#/hr)		3		3		3		3	3		3	1
Confl. Bikes (#/hr)				4				1			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	483	26	1	19	328	130	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	483	26	0	20	458	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1698	0
Flt Permitted		
Satd. Flow (perm)	1698	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	103	
Link Speed (mph)	30	
Link Distance (ft)	362	
Travel Time (s)	8.2	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	22.0	33.8		30.0	30.0		30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.5	22.5	33.8		30.0	30.0		30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	26.1%	26.1%	39.2%		34.8%	34.8%		34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	19.0	19.0	29.3		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		3.5	4.5		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	1.5	4.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		None
Walk Time (s)			7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0	11.0	11.0	10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0	0	0	0		0	0		0
Act Effct Green (s)		66.5	62.7	62.7		62.6	58.2		10.4	10.4		10.4
Actuated g/C Ratio		0.77	0.73	0.73		0.73	0.67		0.12	0.12		0.12
v/c Ratio		0.16	0.35	0.02		0.03	0.20		0.33	0.28		0.38
Control Delay (s/veh)		3.2	6.3	0.0		3.1	5.4		41.7	32.7		40.7
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.2	6.3	0.0		3.1	5.4		41.7	32.7		40.7
LOS		A	A	A		A	A		D	C		D
Approach Delay (s/veh)			5.5				5.3			35.9		
Approach LOS			A				A			D		
Queue Length 50th (ft)		11	60	0		2	35		19	28		32
Queue Length 95th (ft)		29	184	0		8	70		45	61		65
Internal Link Dist (ft)			300				274			253		
Turn Bay Length (ft)		300		300		100			100			100
Base Capacity (vph)		882	1380	1158		894	2334		260	532		385
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.13	0.35	0.02		0.02	0.20		0.14	0.12		0.16

Intersection Summary

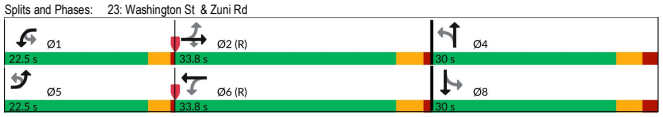
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	34.8%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.4	
Actuated g/C Ratio	0.12	
v/c Ratio	0.59	
Control Delay (s/veh)	24.0	
Queue Delay	0.0	
Total Delay (s/veh)	24.0	
LOS	C	
Approach Delay (s/veh)	28.4	
Approach LOS	C	
Queue Length 50th (ft)	37	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	282	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

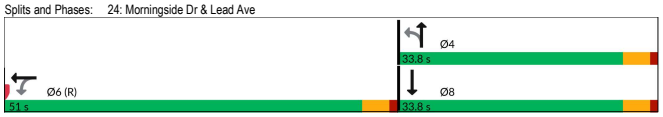


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	458	12	13	15	0	0	15	34
Future Volume (vph)	0	0	0	8	458	12	13	15	0	0	15	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.997						0.905	
Flt Protected					0.999			0.977				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1856	0	0	1678	0
Flt Permitted					0.999			0.915				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1738	0	0	1678	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	467	12	13	15	0	0	15	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	487	0	0	28	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.47			0.05			0.08	
Control Delay (s/veh)					13.5			18.9			9.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.5			18.9			9.6	
LOS					B			B			A	
Approach Delay (s/veh)					13.5			18.9			9.6	
Approach LOS					B			B			A	
Queue Length 50th (ft)					146			10			5	
Queue Length 95th (ft)					222			28			28	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1037			600			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.47			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	51	442	40	65	173	0	0	150	55
Future Volume (vph)	0	0	0	51	442	40	65	173	0	0	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)				0		0	140		0	0		0
Storage Lanes				0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											0.99	
Frt					0.990						0.964	
Flt Protected					0.995		0.950					
Satd. Flow (prot)	0	0	0	0	1872	0	1805	1900	0	0	1820	0
Flt Permitted					0.995		0.340					
Satd. Flow (perm)	0	0	0	0	1872	0	646	1900	0	0	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	52	451	41	66	177	0	0	153	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	544	0	66	177	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

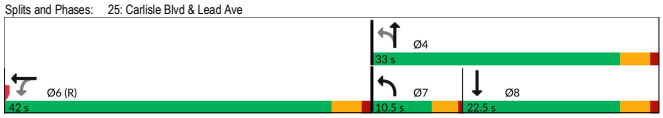
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.7		21.3	20.3			12.3	
Actuated g/C Ratio					0.61		0.28	0.27			0.16	
v/c Ratio					0.48		0.24	0.35			0.66	
Control Delay (s/veh)					11.3		10.3	16.3			35.6	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.3		10.3	16.3			35.6	
LOS					B		B	B			D	
Approach Delay (s/veh)					11.3			14.7			35.6	
Approach LOS					B			B			D	
Queue Length 50th (ft)					131		9	31			82	
Queue Length 95th (ft)					252		m17	41			137	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1144		291	722			454	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.48		0.23	0.25			0.46	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



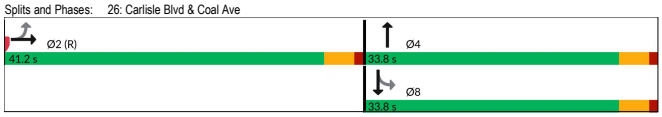
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Future Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.983						0.974				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1855	0	0	0	0	0	1843	0	1805	1900	0
Flt Permitted		0.996								0.385		
Satd. Flow (perm)	0	1855	0	0	0	0	0	1843	0	732	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	45	486	76	0	0	0	0	196	47	26	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	607	0	0	0	0	0	243	0	26	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.2						13.8		13.8	13.8	
Actuated g/C Ratio		0.70						0.18		0.18	0.18	
v/c Ratio		0.47						0.69		0.19	0.52	
Control Delay (s/veh)		7.3						36.0		39.9	44.5	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		7.3						36.0		39.9	44.5	
LOS		A						D		D	D	
Approach Delay (s/veh)		7.3						36.0			44.0	
Approach LOS		A						D			D	
Queue Length 50th (ft)		102						98		13	89	
Queue Length 95th (ft)		216						155		m27	151	
Internal Link Dist (ft)		1422				1286		576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1296						731		285	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.47						0.33		0.09	0.24	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C

Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Future Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.894				
Flt Protected		0.999									0.988	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			737			657			532	
Travel Time (s)		31.0			16.8			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	595	8	0	0	0	0	17	63	5	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	80	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

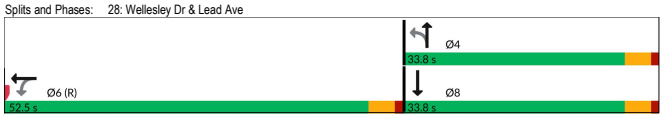
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	550	16	16	9	0	0	10	27
Future Volume (vph)	0	0	0	8	550	16	16	9	0	0	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.996						0.901	
Flt Protected					0.999			0.969				
Satd. Flow (prot)	0	0	0	0	1889	0	0	1841	0	0	1712	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	1889	0	0	1679	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	561	16	16	9	0	0	10	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	585	0	0	25	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.56			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					14.8			19.5			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					14.8			19.5			9.9	
LOS					B			B			A	
Approach Delay (s/veh)					14.8			19.5			9.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					189			9			4	
Queue Length 95th (ft)					283			26			24	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1051			570			599	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.56			0.04			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 14.7		Intersection LOS: B	
Intersection Capacity Utilization 52.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

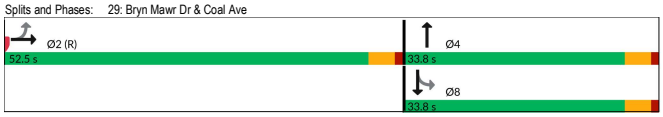


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Future Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.97			1.00	
Frt		0.999						0.884				
Flt Protected		0.999									0.982	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1624	0	0	1866	0
Flt Permitted		0.999									0.961	
Satd. Flow (perm)	0	1895	0	0	0	0	0	1624	0	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	610	3	0	0	0	0	1	6	3	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	628	0	0	0	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.60						0.01			0.01	
Control Delay (s/veh)		15.7						12.4			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		15.7						12.4			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		15.7						12.4			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		211						0			3	
Queue Length 95th (ft)		314						9			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						555			618	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.60						0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 15.7		Intersection LOS: B	
Intersection Capacity Utilization 60.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



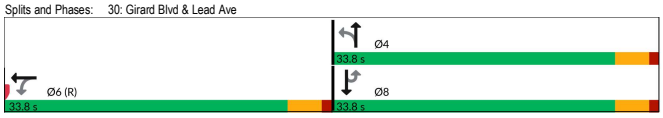
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	592	30	42	190	0	1	0	155
Future Volume (vph)	0	0	0	40	592	30	42	190	0	1	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt					0.994							0.952
Flt Protected					0.997			0.991				
Satd. Flow (prot)	0	0	0	0	1881	0	0	1883	0	0	0	1793
Flt Permitted					0.997			0.833				0.999
Satd. Flow (perm)	0	0	0	0	1881	0	0	1582	0	0	0	1791
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					5							52
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		25.8			33.6			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	604	31	43	194	0	1	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	676	0	0	237	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2		1	2		1		2
Detector Template				Left	Thru		Left	Thru		Left		Thru
Leading Detector (ft)				20	100		20	100		20		100
Trailing Detector (ft)				0	0		0	0		0		0
Detector 1 Position(ft)				0	0		0	0		0		0
Detector 1 Size(ft)				20	6		20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	88
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases				6			4			8		
Detector Phase				6	6		4	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0		8.0		8.0
Minimum Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (%)				50.0%	50.0%		50.0%	50.0%		50.0%		50.0%
Maximum Green (s)				29.3	29.3		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode				C-Max	C-Max		None	None		None		None
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					44.8			13.8				13.8
Actuated g/C Ratio					0.66			0.20				0.20
v/c Ratio					0.54			0.73				0.61
Control Delay (s/veh)					9.0			38.1				24.8
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					9.0			38.1				24.8
LOS					A			D				C
Approach Delay (s/veh)					9.0			38.1				24.8
Approach LOS					A			D				C
Queue Length 50th (ft)					122			93				73
Queue Length 95th (ft)					264			146				124
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)					1247			685				805
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.54			0.35				0.31

Intersection Summary
Area Type: Other
Cycle Length: 67.6
Actuated Cycle Length: 67.6
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay (s/veh): 18.3 Intersection LOS: B
Intersection Capacity Utilization 72.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 30: Girard Blvd & Lead Ave



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

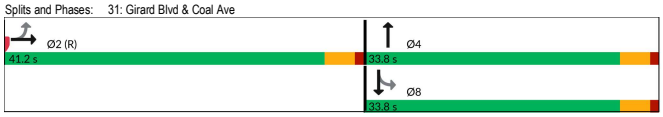
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Future Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.990						0.978				
Flt Protected		0.994									0.990	
Satd. Flow (prot)	0	1866	0	0	0	0	0	1851	0	0	1881	0
Flt Permitted		0.994									0.823	
Satd. Flow (perm)	0	1865	0	0	0	0	0	1851	0	0	1563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	80	553	50	0	0	0	0	159	31	40	163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	190	0	0	203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.7						13.3			13.3	
Actuated g/C Ratio		0.70						0.18			0.18	
v/c Ratio		0.52						0.56			0.73	
Control Delay (s/veh)		20.5						31.4			44.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		20.5						31.4			44.2	
LOS		C						C			D	
Approach Delay (s/veh)		20.5						31.4			44.2	
Approach LOS		C						C			D	
Queue Length 50th (ft)		319						75			90	
Queue Length 95th (ft)		425						124			145	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1312						732			610	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.26			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 26.9		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



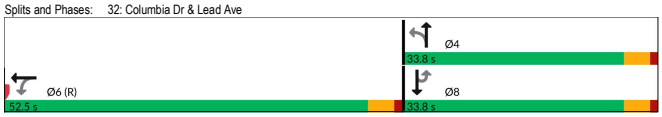
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	693	26	9	24	0	1	0	9
Future Volume (vph)	0	0	0	23	693	26	9	24	0	1	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00				0.98
Frt					0.995							0.909
Flt Protected					0.998			0.987				0.998
Satd. Flow (prot)	0	0	0	0	1887	0	0	1875	0	0	0	1696
Flt Permitted					0.998			0.955				0.997
Satd. Flow (perm)	0	0	0	0	1887	0	0	1812	0	0	0	1694
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					3							21
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		27.2			25.8			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	23	707	27	9	24	0	1	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	757	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8
Permitted Phases				6			4			8		
Minimum Split (s)				41.2	41.2		33.8	33.8		33.8		33.8
Total Split (s)				52.5	52.5		33.8	33.8		33.8		33.8
Total Split (%)				60.8%	60.8%		39.2%	39.2%		39.2%		39.2%
Maximum Green (s)				48.0	48.0		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					48.0			29.3				29.3
Actuated g/C Ratio					0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	21
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio					0.72			0.05				0.05
Control Delay (s/veh)					19.1			19.6				11.0
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					19.1			19.6				11.0
LOS					B			B				B
Approach Delay (s/veh)					19.1			19.6				11.0
Approach LOS					B			B				B
Queue Length 50th (ft)					282			12				4
Queue Length 95th (ft)					423			32				22
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)					1050			615				589
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.72			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 32: Columbia Dr & Lead Ave



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

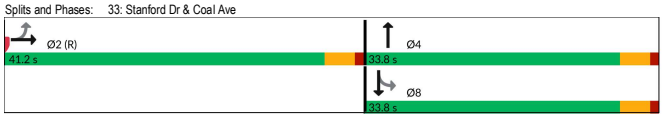
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Future Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			0.99	
Frt		0.999						0.973				
Flt Protected		0.999									0.967	
Satd. Flow (prot)	0	1859	0	0	0	0	0	1800	0	0	1801	0
Flt Permitted		0.999									0.908	
Satd. Flow (perm)	0	1859	0	0	0	0	0	1800	0	0	1681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	18	669	6	0	0	0	0	4	1	11	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	693	0	0	0	0	0	5	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8			33.8	33.8
Total Split (s)	41.2	41.2						33.8			33.8	33.8
Total Split (%)	54.9%	54.9%						45.1%			45.1%	45.1%
Maximum Green (s)	36.7	36.7						29.3			29.3	29.3
Yellow Time (s)	3.5	3.5						3.5			3.5	3.5
All-Red Time (s)	1.0	1.0						1.0			1.0	1.0
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	
v/c Ratio		0.76						0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		22.5						13.2			14.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.5						13.2			14.3	
LOS		C						B			B	
Approach Delay (s/veh)		22.5						13.2			14.3	
Approach LOS		C						B			B	
Queue Length 50th (ft)		248						1			4	
Queue Length 95th (ft)		386						7			16	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		910						703			656	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.76						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.2		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave

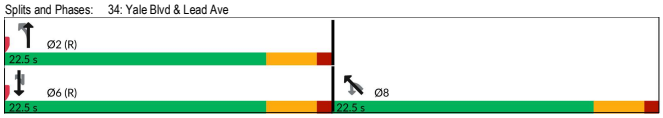


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	213	0	0	219	95	0	0	0	189	451	140
Future Volume (vph)	76	213	0	0	219	95	0	0	0	189	451	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.964	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1796	0
Flt Permitted	0.619									0.950		
Satd. Flow (perm)	1153	1863	0	0	1863	1583	0	0	0	1770	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						97					41	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		844			1282			105			163	
Travel Time (s)		23.0			29.1			2.4			3.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	78	217	0	0	223	97	0	0	0	193	460	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	217	0	0	223	97	0	0	0	193	603	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.17	0.29			0.30	0.14				0.27	0.81	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	4.3	4.5			10.6	3.2				10.4	23.0	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	4.3	4.5			10.6	3.2				10.4	23.0	
LOS	A	A			B	A				B	C	
Approach Delay (s/veh)		4.4			8.4						20.0	
Approach LOS		A			A						B	
Queue Length 50th (ft)	5	14			37	0				32	121	
Queue Length 95th (ft)	m8	m22			74	19				65	#279	
Internal Link Dist (ft)		764			1202				25		83	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	461	745			745	691				708	743	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.17	0.29			0.30	0.14				0.27	0.81	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay (s/veh): 14.1 Intersection LOS: B
Intersection Capacity Utilization 64.0% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Yale Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	416	107	0	0	0	0	274	155	112	296	0
Future Volume (vph)	42	416	107	0	0	0	0	274	155	112	296	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97					0.99		0.99		
Frt			0.850					0.951				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1787	0	1805	1900	0
Flt Permitted	0.950									0.310		
Satd. Flow (perm)	1805	1900	1574	0	0	0	0	1787	0	585	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109					75				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			844	
Travel Time (s)		13.3			8.9			12.4			19.2	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	424	109	0	0	0	0	280	158	114	302	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	424	109	0	0	0	0	438	0	114	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

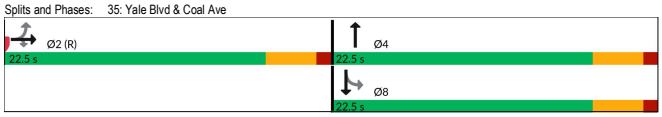
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	22.0	22.0	22.0					14.0		14.0	14.0	
Actuated g/C Ratio	0.49	0.49	0.49					0.31		0.31	0.31	
v/c Ratio	0.05	0.46	0.13					0.72		0.63	0.51	
Control Delay (s/veh)	7.9	10.9	2.9					17.9		30.5	16.8	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	7.9	10.9	2.9					17.9		30.5	16.8	
LOS	A	B	A					B		C	B	
Approach Delay (s/veh)		9.1						17.9			20.5	
Approach LOS		A						B			C	
Queue Length 50th (ft)	5	67	0					77		30	66	
Queue Length 95th (ft)	20	146	20					134		#63	138	
Internal Link Dist (ft)		507			310			465			764	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	881	927	823					759		234	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.05	0.46	0.13					0.58		0.49	0.40	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 15.1	Intersection LOS: B
Intersection Capacity Utilization 64.0%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 35: Yale Blvd & Coal Ave

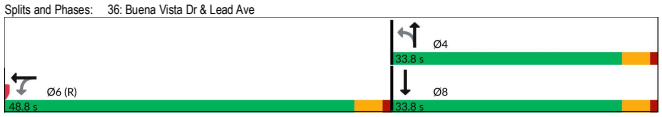


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	631	11	57	11	0	0	7	8
Future Volume (vph)	0	0	0	19	631	11	57	11	0	0	7	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.928	
Flt Protected					0.999			0.960				
Satd. Flow (prot)	0	0	0	0	1893	0	0	1824	0	0	1738	0
Flt Permitted					0.999			0.801				
Satd. Flow (perm)	0	0	0	0	1892	0	0	1516	0	0	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	19	644	11	58	11	0	0	7	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	674	0	0	69	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.66			0.13			0.02	
Control Delay (s/veh)					17.8			18.9			12.7	
Queue Delay					0.3			0.0			0.0	
Total Delay (s/veh)					18.1			18.9			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					18.1			18.9			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					234			24			2	
Queue Length 95th (ft)					353			52			14	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1015			537			621	
Starvation Cap Reductn					59			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.71			0.13			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 18.0		Intersection LOS: B	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

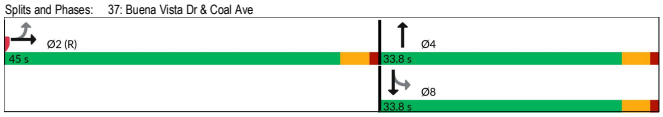


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	542	47	0	0	0	0	40	30	8	23	0
Future Volume (vph)	29	542	47	0	0	0	0	40	30	8	23	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.98			0.99	
Frt		0.990						0.942				
Flt Protected		0.998									0.987	
Satd. Flow (prot)	0	1869	0	0	0	0	0	1762	0	0	1875	0
Flt Permitted		0.998									0.897	
Satd. Flow (perm)	0	1866	0	0	0	0	0	1762	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8						31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	553	48	0	0	0	0	41	31	8	23	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	631	0	0	0	0	0	72	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.9						8.3			8.3	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.41						0.34			0.17	
Control Delay (s/veh)		3.5						25.7			34.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		3.5						25.7			34.3	
LOS		A						C			C	
Approach Delay (s/veh)		3.5						25.7			34.3	
Approach LOS		A						C			C	
Queue Length 50th (ft)		72						19			14	
Queue Length 95th (ft)		127						55			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1537						674			629	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.41						0.11			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	530	97	59	278	0	2	0	340
Future Volume (vph)	0	0	0	83	530	97	59	278	0	2	0	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0		0	
Storage Lanes	0		0	0		1	1		0		0	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	0.91
Ped Bike Factor					1.00	0.98	1.00					1.00
Frt						0.850						0.979
Flt Protected					0.993		0.950					
Satd. Flow (prot)	0	0	0	0	1887	1615	1805	5187	0	0	0	5058
Flt Permitted					0.993		0.440					0.939
Satd. Flow (perm)	0	0	0	0	1885	1586	833	5187	0	0	0	4749
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)						82						38
Link Speed (mph)		30			30			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		48.6			22.7			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	85	541	99	60	284	0	2	0	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	626	99	60	284	0	0	0	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2	1	1	2		1		2
Detector Template				Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)				20	100	20	20	100		20		100
Trailing Detector (ft)				0	0	0	0	0		0		0
Detector 1 Position(ft)				0	0	0	0	0		0		0
Detector 1 Size(ft)				20	6	20	20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA	Perm	pm+pt	NA		Perm		NA
Protected Phases					6		7	4				8
Permitted Phases				6		6	4			8		
Detector Phase				6	6	6	7	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0		8.0		8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%		30.0%		30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0		18.0		18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5		3.5		3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				0.0
Total Lost Time (s)					5.5	5.5	4.0	4.5				4.5
Lead/Lag							Lead			Lag		Lag
Lead-Lag Optimize?							Yes			Yes		Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0		3.0		3.0
Recall Mode				C-Max	C-Max	C-Max	None	Max		Max		Max
Walk Time (s)				7.0	7.0	7.0		7.0		7.0		7.0
Flash Don't Walk (s)				23.0	23.0	23.0		10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0	0		0		0		0
Act Effct Green (s)					32.0	32.0	33.5	33.0				26.9
Actuated g/C Ratio					0.43	0.43	0.45	0.44				0.36
v/c Ratio					0.78	0.14	0.14	0.12				0.23
Control Delay (s/veh)					26.9	5.0	12.7	12.6				16.8
Queue Delay					0.0	0.0	0.0	0.0				0.0
Total Delay (s/veh)					26.9	5.0	12.7	12.6				16.8
LOS					C	A	B	B				B
Approach Delay (s/veh)					23.9			12.7				16.8
Approach LOS					C			B				B
Queue Length 50th (ft)					241	4	15	27				46
Queue Length 95th (ft)					#386	30	35	42				71
Internal Link Dist (ft)		2058			918			690				1038
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					804	723	514	2282				1726
Starvation Cap Reductn					0	0	0	0				0
Spillback Cap Reductn					0	0	0	0				0
Storage Cap Reductn					0	0	0	0				0
Reduced v/c Ratio					0.78	0.14	0.12	0.12				0.23

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78

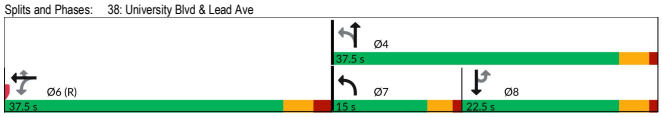
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 19.3 Intersection LOS: B
Intersection Capacity Utilization 68.8% ICU Level of Service C
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



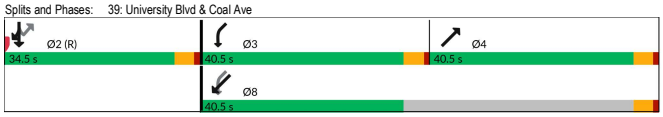
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	411	77	0	285	104	94	316	0
Future Volume (vph)	0	0	0	25	411	77	0	285	104	94	316	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				0.99					0.94			
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.497		
Satd. Flow (perm)	0	0	0	1794	1900	1615	0	5187	1526	944	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			106			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	26	419	79	0	291	106	96	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	419	79	0	291	106	96	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.06	0.85	0.17		0.18	0.07	0.11	0.09	
Control Delay (s/veh)				32.7	58.0	13.8		29.4	0.1	7.3	7.1	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.7	58.0	13.8		29.4	0.1	7.3	7.1	
LOS				C	E	B		C	A	A	A	
Approach Delay (s/veh)					50.1			21.5			7.1	
Approach LOS					D			C			A	
Queue Length 50th (ft)				15	297	12		57	0	23	28	
Queue Length 95th (ft)				38	#464	51		81	0	42	40	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				465	493	461		1616	1526	893	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.06	0.85	0.17		0.18	0.07	0.11	0.09	

Intersection Summary
Area Type: Other
Cycle Length: 115.5
Actuated Cycle Length: 115.5
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 28.2 Intersection LOS: C
Intersection Capacity Utilization 68.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave

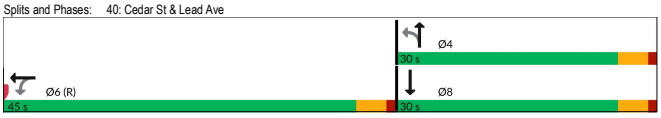


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	657	20	16	38	0	0	17	81
Future Volume (vph)	0	0	0	29	657	20	16	38	0	0	17	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.996						0.888	
Flt Protected					0.998			0.986				
Satd. Flow (prot)	0	0	0	0	1887	0	0	1873	0	0	1687	0
Flt Permitted					0.998			0.866				
Satd. Flow (perm)	0	0	0	0	1887	0	0	1645	0	0	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						83	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	30	670	20	16	39	0	0	17	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	720	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					61.1			8.3			8.3	
Actuated g/C Ratio					0.81			0.11			0.11	
v/c Ratio					0.47			0.30			0.38	
Control Delay (s/veh)					6.4			35.3			15.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					6.4			35.3			15.0	
LOS					A			D			B	
Approach Delay (s/veh)					6.4			35.3			15.0	
Approach LOS					A			D			B	
Queue Length 50th (ft)					128			24			7	
Queue Length 95th (ft)					244			56			49	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1537			559			628	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.47			0.10			0.16	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay (s/veh): 9.2 Intersection LOS: A
Intersection Capacity Utilization 61.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 40: Cedar St & Lead Ave

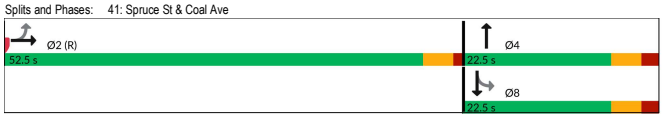


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	519	7	0	0	0	0	7	7	8	10	0
Future Volume (vph)	16	519	7	0	0	0	0	7	7	8	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.998						0.932				
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1733	0	0	1858	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	1893	0	0	0	0	0	1733	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	530	7	0	0	0	0	7	7	8	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	553	0	0	0	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.31						0.07			0.09	
Control Delay (s/veh)		1.4						24.0			31.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						24.0			31.4	
LOS		A						C			C	
Approach Delay (s/veh)		1.4						24.0			31.4	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						3			8	
Queue Length 95th (ft)		101						19			26	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1802						398			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.31						0.04			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 2.9		Intersection LOS: A	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



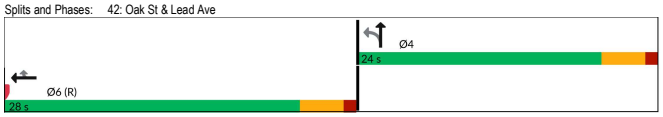
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	299	454	71	482	0	0	0	0
Future Volume (vph)	0	0	0	0	299	454	71	482	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						196	72					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	305	463	72	492	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	305	463	72	492	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					31.1	31.1	11.9	11.9				
Actuated g/C Ratio					0.60	0.60	0.23	0.23				
v/c Ratio					0.27	0.45	0.15	0.59				
Control Delay (s/veh)					6.6	5.5	5.2	20.4				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.6	5.5	5.2	20.4				
LOS					A	A	A	C				
Approach Delay (s/veh)					5.9			18.5				
Approach LOS					A			B				
Queue Length 50th (ft)					37	32	0	71				
Queue Length 95th (ft)					89	101	21	96				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1134	1026	721	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.27	0.45	0.10	0.36				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 11.2		Intersection LOS: B	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	583	0	0	0	0	0	231	62	0	0	0
Future Volume (vph)	315	583	0	0	0	0	0	231	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.968				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4997	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4997	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	321							63				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	321	595	0	0	0	0	0	236	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	595	0	0	0	0	0	299	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.28	0.56						0.26				
Control Delay (s/veh)	1.5	9.1						12.0				
Queue Delay	0.0	0.5						0.0				
Total Delay (s/veh)	1.5	9.7						12.0				
LOS	A	A						B				
Approach Delay (s/veh)		6.8						12.0				
Approach LOS		A						B				
Queue Length 50th (ft)	0	85						18				
Queue Length 95th (ft)	23	153						35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1145	1055						1926				
Starvation Cap Reductn	0	164						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.28	0.67						0.16				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Intersection Signal Delay (s/veh): 8.1	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

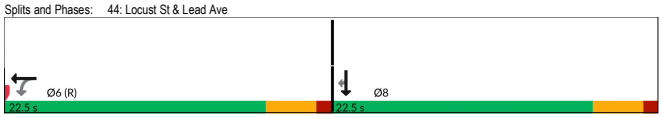
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	90	341	0	0	0	0	0	308	434
Future Volume (vph)	0	0	0	90	341	0	0	0	0	0	308	434
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.940	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	1900	0	0	0	0	0	3251	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	1900	0	0	0	0	0	3251	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				92							208	235
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	92	348	0	0	0	0	0	314	443
Shared Lane Traffic (%)												47%
Lane Group Flow (vph)	0	0	0	92	348	0	0	0	0	0	522	235
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				CI+Ex	CI+Ex						CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					CI+Ex						CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				23.1	23.1						12.9	12.9
Actuated g/C Ratio				0.51	0.51						0.29	0.29
v/c Ratio				0.09	0.36						0.48	0.40
Control Delay (s/veh)				2.8	9.0						8.7	4.1
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.8	9.0						8.7	4.1
LOS				A	A						A	A
Approach Delay (s/veh)					7.7						7.3	
Approach LOS					A						A	
Queue Length 50th (ft)				0	44						36	0
Queue Length 95th (ft)				18	116						54	32
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				971	975						1425	729
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.36						0.37	0.32

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	

Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



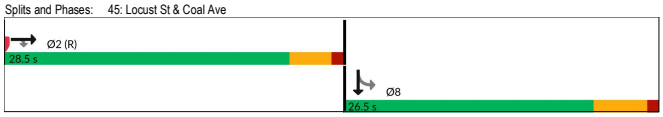
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	583	66	0	0	0	0	0	0	315	89	0
Future Volume (vph)	0	583	66	0	0	0	0	0	0	315	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.99									
Frt			0.850									
Flt Protected										0.950	0.969	
Satd. Flow (prot)	0	1900	1615	0	0	0	0	0	0	1643	3351	0
Flt Permitted										0.950	0.969	
Satd. Flow (perm)	0	1900	1593	0	0	0	0	0	0	1643	3351	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			65							160	161	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	595	67	0	0	0	0	0	0	321	91	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	595	67	0	0	0	0	0	0	160	252	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		35.0	35.0							10.0	10.0	
Actuated g/C Ratio		0.64	0.64							0.18	0.18	
v/c Ratio		0.49	0.06							0.37	0.34	
Control Delay (s/veh)		7.0	1.5							7.0	9.4	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		7.0	1.5							7.0	9.4	
LOS		A	A							A	A	
Approach Delay (s/veh)		6.5									8.5	
Approach LOS		A									A	
Queue Length 50th (ft)		85	0							0	13	
Queue Length 95th (ft)		144	10							43	41	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1208	1036							726	1379	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.49	0.06							0.22	0.18	

Intersection Summary	
Area Type:	Other
Cycle Length: 55	
Actuated Cycle Length: 55	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Intersection Signal Delay (s/veh): 7.3	Intersection LOS: A
Intersection Capacity Utilization 47.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 45: Locust St & Coal Ave



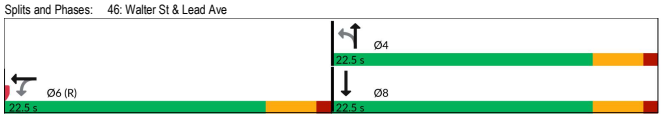
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Future Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.994						0.932	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	1884	0	0	1866	0	0	1747	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1884	0	0	1900	0	0	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						5	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	650	30	4	7	0	0	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	696	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.40			0.03			0.03	
Control Delay (s/veh)					2.2			22.4			12.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					2.2			22.4			12.8	
LOS					A			C			B	
Approach Delay (s/veh)					2.2			22.4			12.8	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			3			1	
Queue Length 95th (ft)					129			m12			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					1742			760			701	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.40			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 2.6		Intersection LOS: A	
Intersection Capacity Utilization 58.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



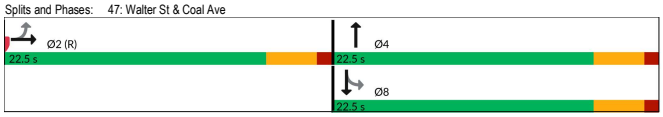
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Future Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.900				
Flt Protected											0.983	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1682	0	0	1868	0
Flt Permitted												
Satd. Flow (perm)	0	1898	0	0	0	0	0	1682	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						23				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		838			715			226			362	
Travel Time (s)		19.0			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	608	3	0	0	0	0	8	23	7	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.35						0.10			0.06	
Control Delay (s/veh)		2.3						10.1			17.9	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.3						10.1			17.9	
LOS		A						B			B	
Approach Delay (s/veh)		2.3						10.1			17.9	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			5	
Queue Length 95th (ft)		127						18			m14	
Internal Link Dist (ft)		758			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1755						686			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.35						0.05			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 3.2		Intersection LOS: A	
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Future Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						0.99		1.00				
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	1754	3574	0	0	3574
Flt Permitted				0.950				0.482				
Satd. Flow (perm)	0	0	0	1805	1900	1593	0	887	3574	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						56						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	0	0	0	77	463	96	2	67	371	0	0	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	77	463	96	0	69	371	0	0	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex			CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					CI+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1589
Right Turn on Red	Yes
Satd. Flow (RTOR)	79
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	79
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	24.2	24.2	47.3			47.3
Total Split (s)				38.5	38.5	38.5	31.9	31.9	47.3			47.3
Total Split (%)				32.7%	32.7%	32.7%	27.1%	27.1%	40.2%			40.2%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	42.8			42.8
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		46.9	42.8			42.8
Actuated g/C Ratio				0.50	0.50	0.50		0.40	0.36			0.36
v/c Ratio				0.09	0.49	0.12		0.18	0.29			0.28
Control Delay (s/veh)				16.8	22.5	8.2		21.9	27.4			27.2
Queue Delay				0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)				16.8	22.5	8.2		21.9	27.4			27.2
LOS				B	C	A		C	C			C
Approach Delay (s/veh)					19.7				26.5			23.4
Approach LOS					B				C			C
Queue Length 50th (ft)				31	234	16		30	104			101
Queue Length 95th (ft)				59	330	46		59	143			140
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				896	943	819		730	1299			1299
Starvation Cap Reductn				0	0	0		0	0			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.09	0.49	0.12		0.09	0.29			0.28

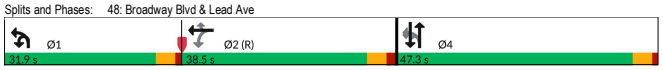
Intersection Summary
Area Type: Other
Cycle Length: 117.7
Actuated Cycle Length: 117.7
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	42.8
Actuated g/C Ratio	0.36
v/c Ratio	0.13
Control Delay (s/veh)	6.0
Queue Delay	0.0
Total Delay (s/veh)	6.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	32
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	628
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 22.7	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Future Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.99		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3574	1615	0	1805	3610
Flt Permitted	0.950										0.459	
Satd. Flow (perm)	1798	3610	1589	0	0	0	0	3574	1594	0	871	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			66						69			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			267			421				359
Travel Time (s)		10.8			6.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	36	489	66	0	0	0	0	394	52	4	64	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	66	0	0	0	0	394	52	0	68	362
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9		61.4	37.9
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34		0.56	0.34
v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29
Control Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
LOS	C	C	A					C	A		B	C
Approach Delay (s/veh)		28.8						24.7				24.4
Approach LOS		C						C				C
Queue Length 50th (ft)	18	144	0					106	0		19	97
Queue Length 95th (ft)	42	194	31					147	18		37	136
Internal Link Dist (ft)		395			187			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	557	1119	538					1231	594		681	1243
Starvation Cap Reductn	0	0	0					0	0		0	0
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 26.3		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	61	361
Future Volume (vph)	42	26	420	18	1	61	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.993
Satd. Flow (prot)	1713	0	1853	0	0	0	1850
Flt Permitted	0.970						0.993
Satd. Flow (perm)	1713	0	1853	0	0	0	1850
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	62	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	431
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.970			0.997			0.987	
Flt Protected		0.993			0.989			0.997			0.999	
Satd. Flow (prot)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.993			0.989			0.997			0.999	
Satd. Flow (perm)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	65	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.899			0.999			0.994	
Flt Protected		0.997			0.988		0.950			0.950		
Satd. Flow (prot)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.997			0.988		0.950			0.950		
Satd. Flow (perm)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	64	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	58	9	5	7	6	1
Future Volume (vph)	58	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.982				0.981	
Flt Protected	0.958			0.980		
Satd. Flow (prot)	1787	0	0	1862	1864	0
Flt Permitted	0.958			0.980		
Satd. Flow (perm)	1787	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	59	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.2%		ICU Level of Service A	
Analysis Period (min) 15			

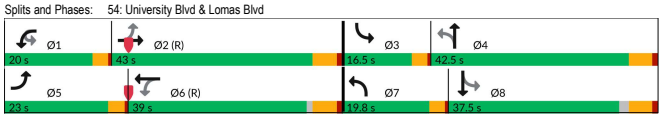
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99			0.98	1.00
Frt		0.981				0.968					0.850	0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11			11	1
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2				6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 122			
Actuated Cycle Length: 122			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

Intersection Summary

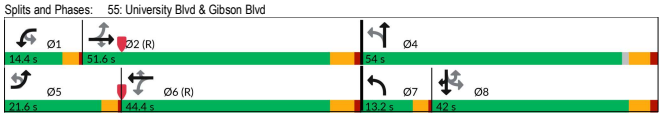
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9	Intersection LOS: C
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	489	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	489	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.994				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3584	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3584	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	499	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	519	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.40			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	29.2			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	29.2			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				31.3				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	153			30	161	
Queue Length 95th (ft)		#354	350	13		60	202			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1300			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.40			0.17	0.57	

Intersection Summary	
Area Type:	Other
Cycle Length: 118.2	
Actuated Cycle Length: 118.2	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.52	

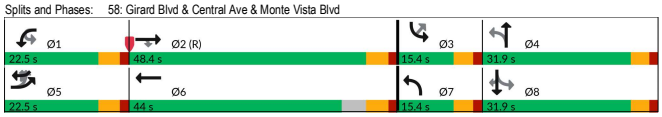
Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 91.5 Intersection LOS: F
Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 37.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	867	0	0	0
Future Volume (vph)	0	0	867	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	885	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	885	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 49.0% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 147	
Actuated Cycle Length: 147	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	

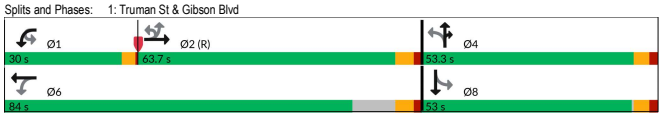
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary

Intersection Signal Delay (s/veh): 30.5	Intersection LOS: C
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

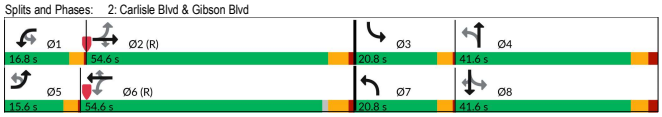
Intersection Summary	
Area Type:	Other
Cycle Length: 133.8	
Actuated Cycle Length: 133.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6 Intersection LOS: B
Intersection Capacity Utilization 82.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



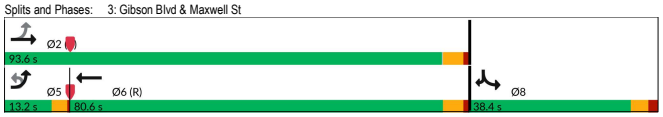
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

Intersection Summary
Area Type: Other
Cycle Length: 132.2
Actuated Cycle Length: 132.2
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48

Intersection Signal Delay (s/veh): 4.1	Intersection LOS: A
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

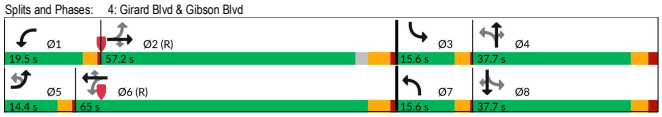
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15
Intersection Summary	

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor						0.99		0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

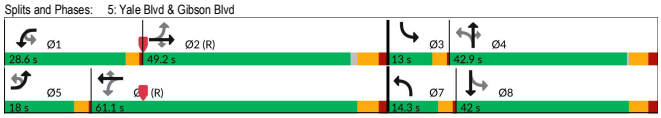
Intersection Summary	
Area Type:	Other
Cycle Length: 135.4	
Actuated Cycle Length: 135.4	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

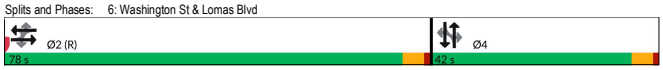
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

Intersection Summary

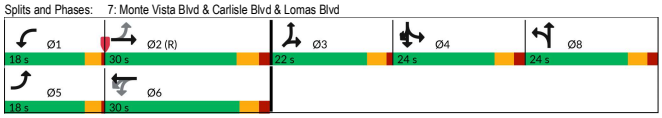
Area Type: Other
Cycle Length: 118
Actuated Cycle Length: 118
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay (s/veh): 84.6 Intersection LOS: F
Intersection Capacity Utilization 100.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru			Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 30.3		Intersection LOS: C	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd

Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

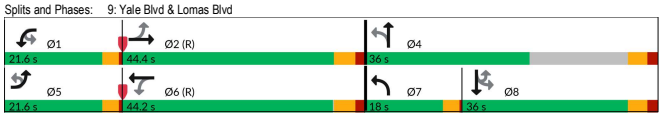
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Yale Blvd & Lomas Blvd



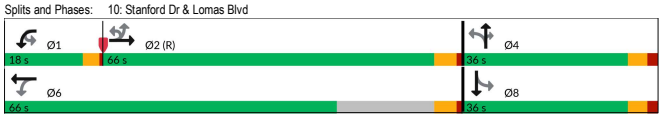
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	157	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	157	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.268				0.199			0.316			0.381
Satd. Flow (perm)	0	494	1881	0	0	378	1883	0	598	1869	0	718
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			701		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	164	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	164	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		16.5	61.8			20.1	68.0		30.0	30.0		30.0
Actuated g/C Ratio		0.13	0.49			0.16	0.54		0.24	0.24		0.24
v/c Ratio		0.67	0.44			0.90	0.43		1.16	0.57		0.05
Control Delay (s/veh)		95.8	25.5			144.1	23.4		167.0	45.5		32.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	25.5			144.1	23.4		167.0	45.5		32.3
LOS		F	C			F	C		F	D		C
Approach Delay (s/veh)			32.3				36.6			92.9		
Approach LOS			C				D			F		
Queue Length 50th (ft)		33	218			43	228		~157	183		6
Queue Length 95th (ft)		#93	347			#134	387		#250	234		18
Internal Link Dist (ft)			1288				848			621		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		69	919			61	1014		220	691		264
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.62	0.44			0.89	0.43		0.75	0.37		0.03

Intersection Summary

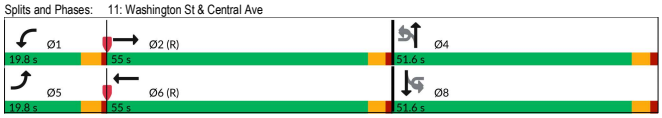
Area Type: Other
Cycle Length: 126.4
Actuated Cycle Length: 126.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay (s/veh): 51.7 Intersection LOS: D
Intersection Capacity Utilization 67.4% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	30.0	
Actuated g/C Ratio	0.24	
v/c Ratio	0.66	
Control Delay (s/veh)	48.3	
Queue Delay	0.0	
Total Delay (s/veh)	48.3	
LOS	D	
Approach Delay (s/veh)	47.8	
Approach LOS	D	
Queue Length 50th (ft)	212	
Queue Length 95th (ft)	269	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



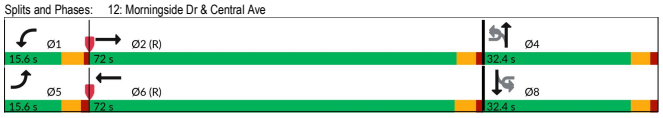
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	568	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	568	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	951	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	592	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	599	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.41			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	8.5			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	8.5			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.6			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	176			25		
Queue Length 95th (ft)		51	203			48	326			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.41			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 14.7		Intersection LOS: B	
Intersection Capacity Utilization 51.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	506	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	506	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	280	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	527	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	527	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.74	0.08	0.14	0.78		0.32
Control Delay (s/veh)		438.7	29.9	1.9		176.2	40.4	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		438.7	29.9	1.9		176.2	40.4	0.2	28.4	60.0		32.6
LOS		F	C	A		F	D	A	C	E		C
Approach Delay (s/veh)			106.7				50.7			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~130	221	0		50	353	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	490	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.74	0.08	0.13	0.57		0.31

Intersection Summary

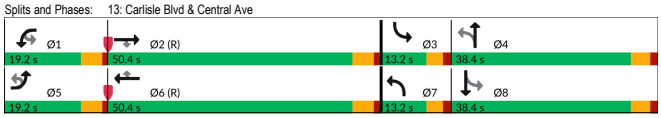
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.78
Intersection Signal Delay (s/veh): 67.4 Intersection LOS: E
Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	543	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	543	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			1.00	1.00			0.94		
Frt			0.990				0.996			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1891	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	977	1872	0	0	1026	1891	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	566	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	581	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.3			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.39			0.35		
Control Delay (s/veh)		64.6	4.3			58.7	7.4			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.6	4.3			58.7	7.4			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.5			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	153			19		
Queue Length 95th (ft)		50	98			46	289			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		99	1471			103	1485			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.39			0.12		

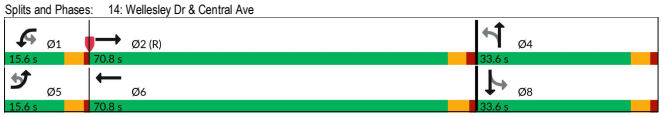
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	

Intersection Summary	

Intersection Signal Delay (s/veh): 11.2	Intersection LOS: B
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	540	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	540	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.998			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1895	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	970	1880	0	0	1051	1895	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	563	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	572	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.39			0.39		
Control Delay (s/veh)		60.2	7.3			69.5	4.0			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.2	7.3			69.5	4.0			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				6.6			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	72			32		
Queue Length 95th (ft)		49	259			51	93			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		97	1469			102	1472			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.39			0.15		

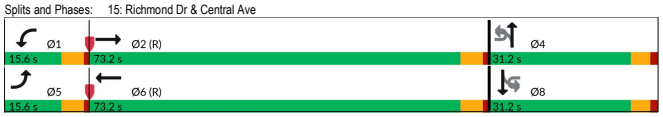
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary

Intersection Signal Delay (s/veh): 12.5	Intersection LOS: B
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	647	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	647	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.97	1.00			0.98		
Frt			0.993				0.990			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3559	0	0	1731	0	0
Flt Permitted		0.563				0.500				0.873		
Satd. Flow (perm)	0	1044	3574	0	0	925	3559	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				10			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	674	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	720	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.30	0.25			0.38	0.30			0.27		
Control Delay (s/veh)		36.8	8.9			38.7	8.6			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		36.8	8.9			38.7	8.6			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	85			14		
Queue Length 95th (ft)		43	137			51	161			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		146	2391			138	2421			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.26	0.25			0.34	0.30			0.10		

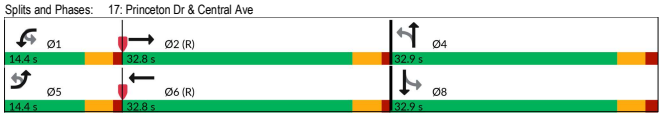
Intersection Summary	
Area Type:	Other
Cycle Length: 80.1	
Actuated Cycle Length: 80.1	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary	

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	667	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	667	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				2			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	695	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	708	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.25			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.6			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.6			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	38			2		8	1
Queue Length 95th (ft)	36	103			30	112			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.25			0.04		0.03	0.06

Intersection Summary

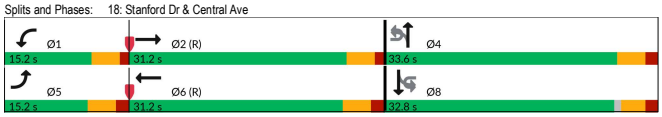
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.25

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 6.7 Intersection LOS: A
Intersection Capacity Utilization 44.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 18: Stanford Dr & Central Ave



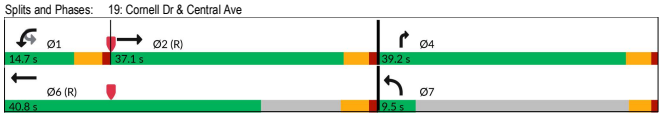
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	675	22	22
Future Volume (vph)	587	58	1	33	675	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	703	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	703	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.21	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.2	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	48	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	509	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.25	0.03	0.04

Intersection Summary
Area Type: Other
Cycle Length: 91
Actuated Cycle Length: 91
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.31

Intersection Signal Delay (s/veh): 4.8 Intersection LOS: A
Intersection Capacity Utilization 39.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	226	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	226	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1274			105
Travel Time (s)		32.1				17.0			34.7			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	235	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	238	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			4.49	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			Error	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			Error	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				525.0			33.3			44.8
Approach LOS		D				F			C			D
Queue Length 50th (ft)	16	222			~359	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#550	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1194			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			4.49	0.19		0.37	0.05	0.20	0.09	0.15

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 4.49

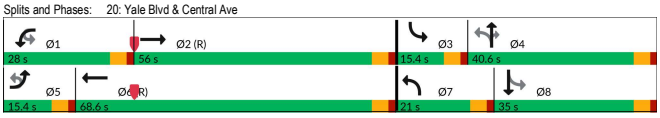
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 251.9 Intersection LOS: F
Intersection Capacity Utilization 60.6% ICU Level of Service B
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	495	21	10	47	555	148	46	338	54	171
Future Volume (vph)	3	53	495	21	10	47	555	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.98		0.97	0.99		0.99
Frt			0.994				0.968			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	3421	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1883	0	0	152	3421	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				23			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	516	22	10	49	578	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	538	0	0	59	732	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.3			47.0	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.39			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.74			1.44	0.49		0.27	0.72		0.67
Control Delay (s/veh)		295.9	52.9			333.5	35.7		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	52.9			333.5	35.7		51.1	78.7		64.4
LOS		F	D			F	D		D	E		E
Approach Delay (s/veh)			76.5				57.9			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	515			~90	294		42	159		168
Queue Length 95th (ft)		#197	678			#206	386		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	726			41	1494		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.74			1.44	0.49		0.18	0.39		0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 172	
Actuated Cycle Length: 172	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	

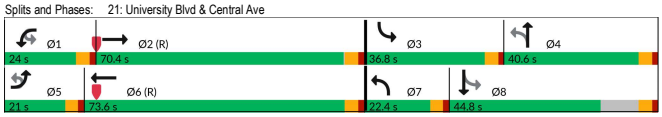
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary	

Intersection Signal Delay (s/veh): 67.2	Intersection LOS: E
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	501	63	6	29	657	0	125	0	64	0
Future Volume (vph)	4	0	501	63	6	29	657	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94					0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.346				0.406			0.950			
Satd. Flow (perm)	0	657	1900	1513	0	771	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							666	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	522	66	6	30	684	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	522	66	0	36	684	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.38	0.06		0.06	0.47		0.53		0.04	
Control Delay (s/veh)		3.3	7.8	1.7		3.3	7.0		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.8	1.7		3.3	7.0		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			7.1				6.8			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	152	0		5	145		98		0	
Queue Length 95th (ft)		3	238	14		13	337		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		677	1389	1124		728	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.38	0.06		0.05	0.47		0.21		0.04	

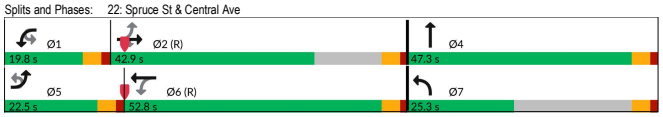
Intersection Summary	
Area Type:	Other
Cycle Length: 122.6	
Actuated Cycle Length: 122.6	
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	572	208	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	572	208	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		0.99		1.00	0.99		1.00	0.99
Frt				0.850		0.960			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1804	1900	1615	1805	3439	0	1805	1830	0	1805	1730
Flt Permitted		0.290			0.414			0.455			0.704	
Satd. Flow (perm)	0	550	1900	1566	787	3439	0	863	1830	0	1336	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		65			15			68
Link Speed (mph)			30			30			30			30
Link Distance (ft)			388			341			419			295
Travel Time (s)			8.8			7.8			9.5			6.7
Confl. Peds. (#/hr)		3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	596	217	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

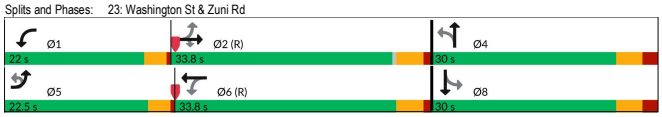
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	25.5%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	18.5	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		65.0	62.4	62.4	58.9	53.7		12.3	12.3		12.3	12.3
Actuated g/C Ratio		0.75	0.72	0.72	0.68	0.62		0.14	0.14		0.14	0.14
v/c Ratio		0.32	0.44	0.02	0.02	0.38		0.34	0.30		0.34	0.64
Control Delay (s/veh)		5.1	7.3	0.0	4.0	8.7		39.5	29.0		36.9	31.7
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	7.3	0.0	4.0	8.7		39.5	29.0		36.9	31.7
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			6.7			8.6			32.6			33.0
Approach LOS			A			A			C			C
Queue Length 50th (ft)		19	97	0	1	91		21	33		33	65
Queue Length 95th (ft)		46	271	0	7	164		49	68		66	124
Internal Link Dist (ft)			308			261			339			215
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		690	1373	1153	810	2165		245	530		379	539
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.24	0.44	0.02	0.02	0.38		0.17	0.15		0.17	0.36

Intersection Summary	
Area Type:	Other
Cycle Length: 86.3	
Actuated Cycle Length: 86.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

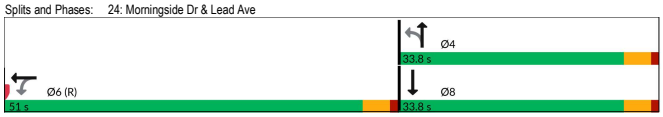


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	714	13	11	10	0	0	17	60
Future Volume (vph)	0	0	0	11	714	13	11	10	0	0	17	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.895	
Flt Protected					0.999			0.974				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1851	0	0	1664	0
Flt Permitted					0.999			0.904				
Satd. Flow (perm)	0	0	0	0	1893	0	0	1718	0	0	1664	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	11	744	14	11	10	0	0	18	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	769	0	0	21	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.74			0.04			0.13	
Control Delay (s/veh)					20.0			18.8			7.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.0			18.8			7.9	
LOS					C			B			A	
Approach Delay (s/veh)					20.0			18.8			7.9	
Approach LOS					C			B			A	
Queue Length 50th (ft)					290			7			6	
Queue Length 95th (ft)					435			23			35	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1038			593			616	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.74			0.04			0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	682	44	156	278	0	0	185	53
Future Volume (vph)	0	0	0	57	682	44	156	278	0	0	185	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						1.00	
Frt					0.992						0.970	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1875	0	1805	1900	0	0	1834	0
Flt Permitted					0.996		0.291					
Satd. Flow (perm)	0	0	0	0	1875	0	553	1900	0	0	1834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	59	710	46	163	290	0	0	193	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	815	0	163	290	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

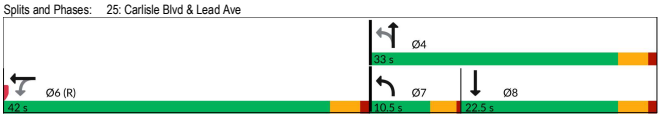
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					42.2		24.8	23.8			13.5	
Actuated g/C Ratio					0.56		0.33	0.32			0.18	
v/c Ratio					0.77		0.55	0.48			0.72	
Control Delay (s/veh)					20.6		26.3	24.4			38.4	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					20.6		26.3	24.4			38.4	
LOS					C		C	C			D	
Approach Delay (s/veh)					20.6			25.1			38.4	
Approach LOS					C			C			D	
Queue Length 50th (ft)					271		41	81			101	
Queue Length 95th (ft)					#549		m69	m116			163	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1058		299	722			453	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.77		0.55	0.40			0.55	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

Intersection Signal Delay (s/veh): 24.8		Intersection LOS: C	
Intersection Capacity Utilization 84.3%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Future Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.978						0.976				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1847	0	1805	1900	0
Flt Permitted		0.995								0.204		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1847	0	388	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	79	611	132	0	0	0	0	372	81	23	228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	822	0	0	0	0	0	453	0	23	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		43.7						22.3		22.3	22.3	
Actuated g/C Ratio		0.58						0.30		0.30	0.30	
v/c Ratio		0.76						0.81		0.20	0.40	
Control Delay (s/veh)		19.7						34.5		37.8	38.5	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		19.7						34.5		37.8	38.5	
LOS		B						C		D	D	
Approach Delay (s/veh)		19.7						34.5			38.4	
Approach LOS		B						C			D	
Queue Length 50th (ft)		257						185		11	114	
Queue Length 95th (ft)		#570						253		m16	m148	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1079						731		151	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.76						0.62		0.15	0.31	

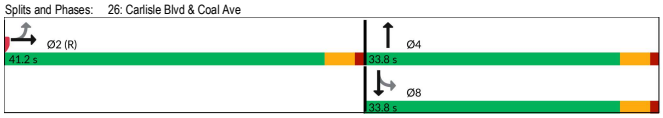
Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 27.2 Intersection LOS: C
Intersection Capacity Utilization 84.3% ICU Level of Service E
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Future Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.874				
Flt Protected		0.999									0.974	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Flt Permitted		0.999									0.974	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			676			657			532	
Travel Time (s)		31.0			15.4			14.9			12.1	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	693	8	0	0	0	0	7	95	11	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	715	0	0	0	0	0	102	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary

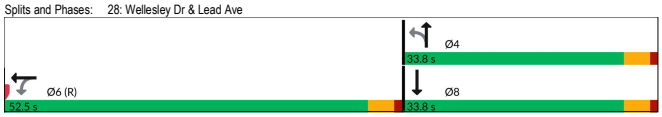
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 50.7% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	735	11	13	17	0	0	7	27
Future Volume (vph)	0	0	0	10	735	11	13	17	0	0	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.998						0.892	
Flt Protected					0.999			0.979				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1860	0	0	1657	0
Flt Permitted					0.999			0.920				
Satd. Flow (perm)	0	0	0	0	1894	0	0	1744	0	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	10	766	11	14	18	0	0	7	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	787	0	0	32	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.75			0.05			0.06	
Control Delay (s/veh)					20.1			19.6			9.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.1			19.6			9.4	
LOS					C			B			A	
Approach Delay (s/veh)					20.1			19.6			9.4	
Approach LOS					C			B			A	
Queue Length 50th (ft)					302			12			3	
Queue Length 95th (ft)					453			31			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			592			581	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.75			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 19.6		Intersection LOS: B	
Intersection Capacity Utilization 61.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

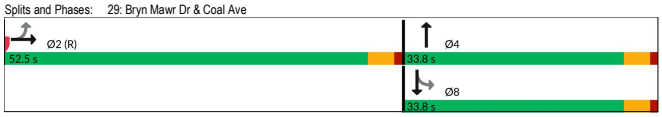


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Future Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00									1.00	
Frt		0.998										
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1900	0	0	1858	0
Flt Permitted		0.999									0.947	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1900	0	0	1791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	817	10	0	0	0	0	5	0	5	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	838	0	0	0	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.80						0.01			0.02	
Control Delay (s/veh)		22.4						19.0			19.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.4						19.0			19.2	
LOS		C						B			B	
Approach Delay (s/veh)		22.4						19.0			19.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		337						2			4	
Queue Length 95th (ft)		508						9			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						645			608	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.80						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



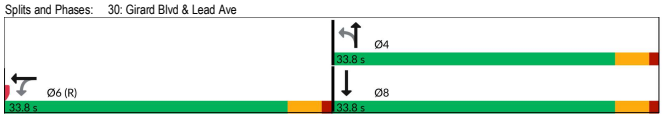
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	783	41	48	208	0	0	175	76
Future Volume (vph)	0	0	0	41	783	41	48	208	0	0	175	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.994						0.959	
Flt Protected					0.998			0.991				
Satd. Flow (prot)	0	0	0	0	1883	0	0	1883	0	0	1809	0
Flt Permitted					0.998			0.755				
Satd. Flow (perm)	0	0	0	0	1883	0	0	1434	0	0	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			2			5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	43	816	43	50	217	0	0	182	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	902	0	0	267	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					43.5			15.1			15.1	
Actuated g/C Ratio					0.64			0.22			0.22	
v/c Ratio					0.74			0.83			0.60	
Control Delay (s/veh)					15.3			46.1			24.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					15.3			46.1			24.7	
LOS					B			D			C	
Approach Delay (s/veh)					15.3			46.1			24.7	
Approach LOS					B			D			C	
Queue Length 50th (ft)					217			106			81	
Queue Length 95th (ft)					#548			164			131	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1212			621			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.74			0.43			0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 22.7		Intersection LOS: C	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 30: Girard Blvd & Lead Ave



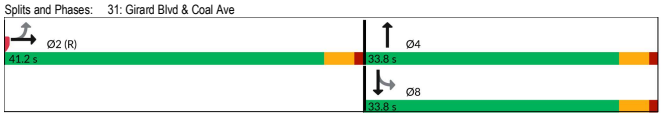
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Future Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.992						0.973				
Flt Protected		0.996									0.990	
Satd. Flow (prot)	0	1874	0	0	0	0	0	1841	0	0	1881	0
Flt Permitted		0.996									0.724	
Satd. Flow (perm)	0	1874	0	0	0	0	0	1841	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6						20				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	802	57	0	0	0	0	182	46	46	177	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	943	0	0	0	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3			14.3	
Actuated g/C Ratio		0.69						0.19			0.19	
v/c Ratio		0.73						0.62			0.85	
Control Delay (s/veh)		24.8						32.2			56.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		24.8						32.2			56.6	
LOS		C						C			E	
Approach Delay (s/veh)		24.8						32.2			56.6	
Approach LOS		C						C			E	
Queue Length 50th (ft)		447						89			101	
Queue Length 95th (ft)		m471						142			162	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1294						731			537	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.73						0.31			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 31.1		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 31: Girard Blvd & Coal Ave

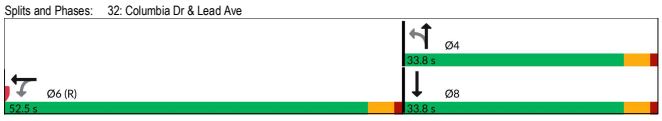


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	812	16	12	23	0	0	15	19
Future Volume (vph)	0	0	0	32	812	16	12	23	0	0	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.997						0.925	
Flt Protected					0.998			0.983				
Satd. Flow (prot)	0	0	0	0	1889	0	0	1868	0	0	1722	0
Flt Permitted					0.998			0.936				
Satd. Flow (perm)	0	0	0	0	1889	0	0	1777	0	0	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	846	17	13	24	0	0	16	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	896	0	0	37	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.85			0.06			0.06	
Control Delay (s/veh)					26.1			19.7			12.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					26.1			19.7			12.0	
LOS					C			B			B	
Approach Delay (s/veh)					26.1			19.7			12.0	
Approach LOS					C			B			B	
Queue Length 50th (ft)					382			13			6	
Queue Length 95th (ft)					#649			34			26	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1051			603			597	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.85			0.06			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 25.4		Intersection LOS: C	
Intersection Capacity Utilization 73.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 32: Columbia Dr & Lead Ave



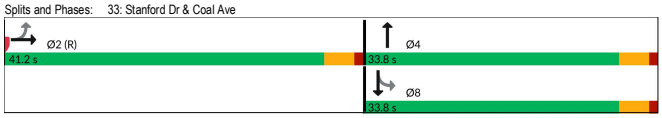
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Future Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			0.99	
Frt		0.999						0.927				
Flt Protected		0.999									0.966	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1733	0	0	1835	0
Flt Permitted		0.999									0.896	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1733	0	0	1689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2			3			3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	872	6	0	0	0	0	6	7	14	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	0	0	0	0	0	13	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.97						0.02			0.03	
Control Delay (s/veh)		44.6						10.7			14.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		44.6						10.7			14.4	
LOS		D						B			B	
Approach Delay (s/veh)		44.6						10.7			14.4	
Approach LOS		D						B			B	
Queue Length 50th (ft)		386						2			6	
Queue Length 95th (ft)		#653						12			18	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		928						681			659	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.97						0.02			0.03	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 0.97
Intersection Signal Delay (s/veh): 43.5 Intersection LOS: D
Intersection Capacity Utilization 67.4% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 33: Stanford Dr & Coal Ave



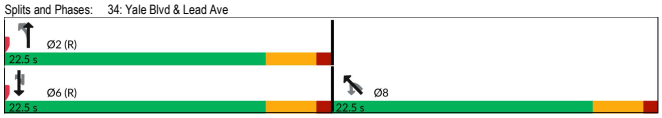
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	117	188	0	0	177	181	0	0	0	204	686	26
Future Volume (vph)	117	188	0	0	177	181	0	0	0	204	686	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.995	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1853	0
Flt Permitted	0.641									0.950		
Satd. Flow (perm)	1194	1863	0	0	1863	1583	0	0	0	1770	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102					5	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			140			171	
Travel Time (s)		23.2			29.0			3.2			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	122	196	0	0	184	189	0	0	0	213	715	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	196	0	0	184	189	0	0	0	213	742	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm					Perm	NA
Protected Phases		2			6							8
Permitted Phases	2					6					8	
Minimum Split (s)	22.5	22.5			22.5	22.5					22.5	22.5
Total Split (s)	22.5	22.5			22.5	22.5					22.5	22.5
Total Split (%)	50.0%	50.0%			50.0%	50.0%					50.0%	50.0%
Maximum Green (s)	18.0	18.0			18.0	18.0					18.0	18.0
Yellow Time (s)	3.5	3.5			3.5	3.5					3.5	3.5
All-Red Time (s)	1.0	1.0			1.0	1.0					1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0					0.0	0.0
Total Lost Time (s)	4.5	4.5			4.5	4.5					4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0					7.0	7.0
Flash Don't Walk (s)	11.0	11.0			11.0	11.0					11.0	11.0
Pedestrian Calls (#/hr)	0	0			0	0					0	0
Act Effct Green (s)	18.0	18.0			18.0	18.0					18.0	18.0
Actuated g/C Ratio	0.40	0.40			0.40	0.40					0.40	0.40
v/c Ratio	0.26	0.26			0.25	0.27					0.30	1.00

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.2	4.8			10.1	5.9				10.7	50.6	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.2	4.8			10.1	5.9				10.7	50.6	
LOS	A	A			B	A				B	D	
Approach Delay (s/veh)		4.9			8.0						41.7	
Approach LOS		A			A						D	
Queue Length 50th (ft)	8	13			30	13				35	179	
Queue Length 95th (ft)	m13	m20			62	43				72	#381	
Internal Link Dist (ft)		772			1194			60			91	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	477	745			745	694				708	744	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.26	0.26			0.25	0.27				0.30	1.00	

Intersection Summary

Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 1.00
Intersection Signal Delay (s/veh): 27.0 Intersection LOS: C
Intersection Capacity Utilization 83.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Yale Blvd & Lead Ave



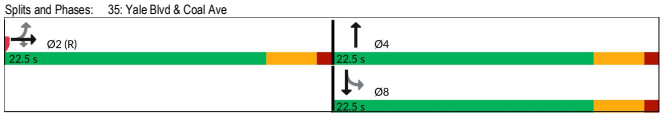
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Future Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97					0.99		1.00		
Frt			0.850					0.945				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	1900	1615	0	0	0	0	1778	0	1805	1900	0
Flt Permitted	0.950									0.267		
Satd. Flow (perm)	1798	1900	1572	0	0	0	0	1778	0	505	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155					82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	771	155	0	0	0	0	293	202	40	336	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	771	155	0	0	0	0	495	0	40	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	21.0	21.0	21.0					15.0		15.0	15.0	
Actuated g/C Ratio	0.47	0.47	0.47					0.33		0.33	0.33	
v/c Ratio	0.06	0.87	0.19					0.77		0.24	0.53	
Control Delay (s/veh)	8.3	28.2	2.8					19.3		17.4	18.5	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	8.3	28.2	2.8					19.3		17.4	18.5	
LOS	A	C	A					B		B	B	
Approach Delay (s/veh)		23.1						19.3			18.4	
Approach LOS		C						B			B	
Queue Length 50th (ft)	7	171	0					87		7	90	
Queue Length 95th (ft)	22	#389	24					159		34	155	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	840	888	817					760		202	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.06	0.87	0.19					0.65		0.20	0.44	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 21.1 Intersection LOS: C
Intersection Capacity Utilization 83.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 35: Yale Blvd & Coal Ave

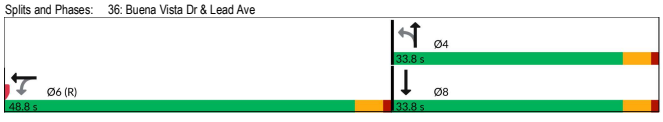


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	713	17	78	22	0	0	8	11
Future Volume (vph)	0	0	0	17	713	17	78	22	0	0	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.997						0.922	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1830	0	0	1725	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	1890	0	0	1503	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	743	18	81	23	0	0	8	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	779	0	0	104	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.77			0.20			0.03	
Control Delay (s/veh)					21.4			19.8			11.9	
Queue Delay					0.6			0.0			0.0	
Total Delay (s/veh)					22.1			19.8			11.9	
LOS					C			B			B	
Approach Delay (s/veh)					22.1			19.8			11.9	
Approach LOS					C			B			B	
Queue Length 50th (ft)					297			37			3	
Queue Length 95th (ft)					450			73			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1014			533			618	
Starvation Cap Reductn					54			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.81			0.20			0.03	

Intersection Summary
Area Type: Other
Cycle Length: 82.6
Actuated Cycle Length: 82.6
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.77
Intersection Signal Delay (s/veh): 21.6 Intersection LOS: C
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 36: Buena Vista Dr & Lead Ave

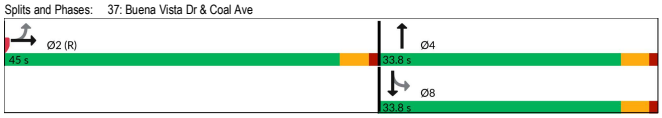


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	775	43	0	0	0	0	62	34	17	18	0
Future Volume (vph)	35	775	43	0	0	0	0	62	34	17	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			0.99	
Frt		0.993						0.953				
Flt Protected		0.998									0.976	
Satd. Flow (prot)	0	1879	0	0	0	0	0	1791	0	0	1854	0
Flt Permitted		0.998									0.795	
Satd. Flow (perm)	0	1878	0	0	0	0	0	1791	0	0	1499	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	807	45	0	0	0	0	65	35	18	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	888	0	0	0	0	0	100	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.4						8.8			8.8	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.58						0.43			0.22	
Control Delay (s/veh)		5.5						28.2			34.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		5.5						28.2			34.6	
LOS		A						C			C	
Approach Delay (s/veh)		5.5						28.2			34.6	
Approach LOS		A						C			C	
Queue Length 50th (ft)		128						30			17	
Queue Length 95th (ft)		261						73			43	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1534						687			557	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.58						0.15			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 8.8		Intersection LOS: A	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	668	96	1	93	322	0	0	436
Future Volume (vph)	0	0	0	53	668	96	1	93	322	0	0	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850						0.972
Flt Protected					0.996			0.950				
Satd. Flow (prot)	0	0	0	0	1892	1615	0	1805	5187	0	0	5042
Flt Permitted					0.996			0.341				
Satd. Flow (perm)	0	0	0	0	1892	1589	0	648	5187	0	0	5042
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						80						66
Link Speed (mph)		30			30				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		48.6			22.7				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	55	696	100	1	97	335	0	0	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	751	100	0	98	335	0	0	558
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	2			2
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	20	100			100
Trailing Detector (ft)				0	0	0	0	0	0			0
Detector 1 Position(ft)				0	0	0	0	0	0			0
Detector 1 Size(ft)				20	6	20	20	20	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94				94			94
Detector 2 Size(ft)					6				6			6
Detector 2 Type					Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	104
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0				0.0			0.0
Turn Type				Perm	NA	Perm	custom	pm+pt	NA			NA
Protected Phases					6			7	4			8
Permitted Phases				6		6	7	4				
Detector Phase				6	6	6	7	7	4			8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	20.0%	50.0%			30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	11.0	33.0			18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.0	3.5			3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0	1.0			1.0
Lost Time Adjust (s)					0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)					5.5	5.5		4.0	4.5			4.5
Lead/Lag							Lead	Lead				Lag
Lead-Lag Optimize?							Yes	Yes				Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0			7.0			7.0
Flash Don't Walk (s)				23.0	23.0	23.0			10.0			10.0
Pedestrian Calls (#/hr)				0	0	0			0			0
Act Effct Green (s)					32.0	32.0		33.5	33.0			24.3
Actuated g/C Ratio					0.43	0.43		0.45	0.44			0.32
v/c Ratio					0.93	0.14		0.25	0.15			0.33
Control Delay (s/veh)					41.2	5.2		14.0	12.8			18.4
Queue Delay					0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)					41.2	5.2		14.0	12.8			18.4
LOS					D	A		B	B			B
Approach Delay (s/veh)					37.0				13.1			18.4
Approach LOS					D				B			B
Queue Length 50th (ft)					321	5		26	32			64
Queue Length 95th (ft)					#546	31		52	49			97
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125				
Base Capacity (vph)					807	723		459	2282			1675
Starvation Cap Reductn					0	0		0	0			0
Spillback Cap Reductn					0	0		0	0			0
Storage Cap Reductn					0	0		0	0			0
Reduced v/c Ratio					0.93	0.14		0.21	0.15			0.33

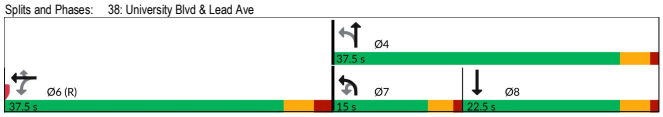
Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 25.8 Intersection LOS: C
Intersection Capacity Utilization 70.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



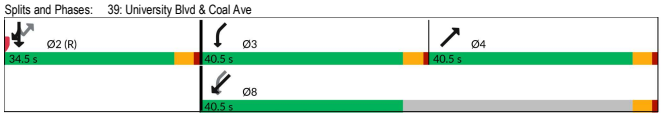
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	655	76	0	324	114	119	349	0
Future Volume (vph)	0	0	0	32	655	76	0	324	114	119	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.96	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.462		
Satd. Flow (perm)	0	0	0	1803	1900	1615	0	5187	1554	877	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			119			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	682	79	0	338	119	124	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	682	79	0	338	119	124	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.07	1.38	0.17		0.21	0.08	0.14	0.11	
Control Delay (s/veh)				32.9	219.2	13.8		29.7	0.1	7.5	7.2	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.9	219.2	13.8		29.7	0.1	7.5	7.2	
LOS				C	F	B		C	A	A	A	
Approach Delay (s/veh)					191.0			22.0			7.3	
Approach LOS					F			C			A	
Queue Length 50th (ft)				19	~674	12		67	0	31	32	
Queue Length 95th (ft)				44	#904	51		93	0	53	45	
Internal Link Dist (ft)			85		451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				468	493	461		1616	1554	870	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.07	1.38	0.17		0.21	0.08	0.14	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	

Intersection Signal Delay (s/veh): 95.0		Intersection LOS: F	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 39: University Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	887	18	6	25	0	0	25	199
Future Volume (vph)	0	0	0	19	887	18	6	25	0	0	25	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.997						0.880	
Flt Protected					0.999			0.991				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1883	0	0	1636	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1681	0	0	1636	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						113	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	20	924	19	6	26	0	0	26	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	963	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0				
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

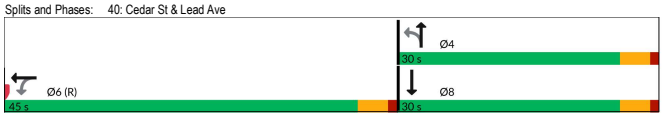
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					54.7			11.3			11.3	
Actuated g/C Ratio					0.73			0.15			0.15	
v/c Ratio					0.70			0.13			0.68	
Control Delay (s/veh)					12.5			26.7			25.5	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.5			26.7			25.5	
LOS					B			C			C	
Approach Delay (s/veh)					12.5			26.7			25.5	
Approach LOS					B			C			C	
Queue Length 50th (ft)					238			13			53	
Queue Length 95th (ft)					m349			33			112	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					1379			571			630	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.70			0.06			0.37	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.70
Intersection Signal Delay (s/veh): 15.4 Intersection LOS: B
Intersection Capacity Utilization 76.7% ICU Level of Service D
Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave



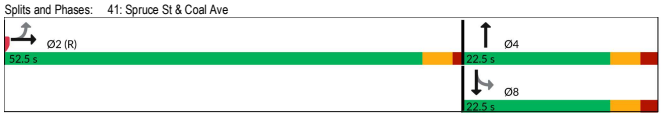
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	746	6	0	0	0	0	2	4	17	12	0
Future Volume (vph)	11	746	6	0	0	0	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.97			1.00	
Frt		0.999						0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1685	0	0	1847	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	1895	0	0	0	0	0	1685	0	0	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	777	6	0	0	0	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	794	0	0	0	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)								8.0		8.0	8.0	
Minimum Split (s)								22.5		22.5	22.5	
Total Split (s)								22.5		22.5	22.5	
Total Split (%)								30.0%		30.0%	30.0%	
Maximum Green (s)								17.0		17.0	17.0	
Yellow Time (s)								3.5		3.5	3.5	
All-Red Time (s)								2.0		2.0	2.0	
Lost Time Adjust (s)								0.0			0.0	
Total Lost Time (s)								5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)								2.0		2.0	2.0	
Recall Mode								None		None	None	
Walk Time (s)								7.0		7.0	7.0	
Flash Don't Walk (s)								10.0		10.0	10.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)								8.0			8.0	
Actuated g/C Ratio								0.11			0.11	
v/c Ratio								0.03			0.16	
Control Delay (s/veh)								23.2			32.5	
Queue Delay								0.0			0.0	
Total Delay (s/veh)								23.2			32.5	
LOS								C			C	
Approach Delay (s/veh)								23.2			32.5	
Approach LOS								C			C	
Queue Length 50th (ft)								1			13	
Queue Length 95th (ft)								12			38	
Internal Link Dist (ft)												
Turn Bay Length (ft)												
Base Capacity (vph)								385			424	
Starvation Cap Reductn								0			0	
Spillback Cap Reductn								0			0	
Storage Cap Reductn								0			0	
Reduced v/c Ratio								0.02			0.07	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay (s/veh): 4.3 Intersection LOS: A
Intersection Capacity Utilization 63.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	522	656	74	555	0	0	0	0
Future Volume (vph)	0	0	0	0	522	656	74	555	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	1900	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	1900	1585	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						143	77					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	544	683	77	578	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	544	683	77	578	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

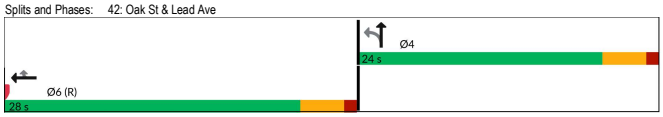
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					29.4	29.4	13.6	13.6				
Actuated g/C Ratio					0.57	0.57	0.26	0.26				
v/c Ratio					0.51	0.71	0.15	0.61				
Control Delay (s/veh)					10.0	13.9	4.5	19.3				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					10.0	13.9	4.5	19.3				
LOS					B	B	A	B				
Approach Delay (s/veh)					12.2			17.5				
Approach LOS					B			B				
Queue Length 50th (ft)					87	98	0	82				
Queue Length 95th (ft)					196	#326	20	106				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					1074	958	725	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.51	0.71	0.11	0.43				

Intersection Summary

Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 14.1 Intersection LOS: B
Intersection Capacity Utilization 63.5% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	726	0	0	0	0	0	226	73	0	0	0
Future Volume (vph)	401	726	0	0	0	0	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.963				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	0	0	0	4995	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	1900	0	0	0	0	0	4995	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	369							76				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	418	756	0	0	0	0	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	756	0	0	0	0	0	311	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.36	0.72						0.27				
Control Delay (s/veh)	2.1	12.4						11.5				
Queue Delay	0.0	1.4						0.0				
Total Delay (s/veh)	2.1	13.8						11.5				
LOS	A	B						B				
Approach Delay (s/veh)		9.6						11.5				
Approach LOS		A						B				
Queue Length 50th (ft)	5	123						18				
Queue Length 95th (ft)	32	226						35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1166	1055						1934				
Starvation Cap Reductn	0	140						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.36	0.83						0.16				

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 10.0		Intersection LOS: B	

Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

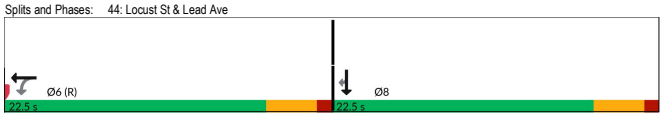
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	488	0	0	0	0	0	300	553
Future Volume (vph)	0	0	0	175	488	0	0	0	0	0	300	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor											0.99	0.98
Frt											0.928	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1787	1900	0	0	0	0	0	3174	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1787	1900	0	0	0	0	0	3174	1436
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				182							207	207
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Peds. (#/hr)	1		1				1		1	2		2
Confl. Bikes (#/hr)			1			10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	182	508	0	0	0	0	0	313	576
Shared Lane Traffic (%)												50%
Lane Group Flow (vph)	0	0	0	182	508	0	0	0	0	0	601	288
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.0	22.0						14.0	14.0
Actuated g/C Ratio				0.49	0.49						0.31	0.31
v/c Ratio				0.19	0.55						0.53	0.49
Control Delay (s/veh)				2.5	12.1						9.4	6.7
Queue Delay				0.0	0.2						0.0	0.0
Total Delay (s/veh)				2.5	12.3						9.4	6.7
LOS				A	B						A	A
Approach Delay (s/veh)					9.7						8.5	
Approach LOS					A						A	
Queue Length 50th (ft)				0	81						43	16
Queue Length 95th (ft)				26	184						67	54
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				968	930						1393	698
Starvation Cap Reductn				0	70						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.19	0.59						0.43	0.41

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Intersection Signal Delay (s/veh): 9.0		Intersection LOS: A	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	95	0	0	0	0	0	0	326	177	0
Future Volume (vph)	0	807	95	0	0	0	0	0	0	326	177	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98									
Frt			0.850									
Flt Protected										0.950	0.977	
Satd. Flow (prot)	0	1900	1615	0	0	0	0	0	0	1643	3378	0
Flt Permitted										0.950	0.977	
Satd. Flow (perm)	0	1900	1586	0	0	0	0	0	0	1643	3378	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			68							84	84	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	841	99	0	0	0	0	0	0	340	184	0
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	841	99	0	0	0	0	0	0	173	351	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	

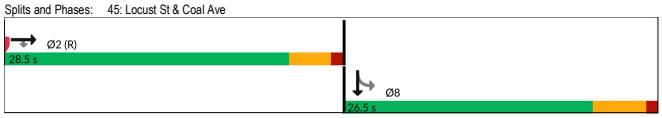
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		34.0	34.0							11.0	11.0	
Actuated g/C Ratio		0.62	0.62							0.20	0.20	
v/c Ratio		0.72	0.10							0.44	0.47	
Control Delay (s/veh)		12.6	2.6							14.1	16.6	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		12.6	2.6							14.1	16.6	
LOS		B	A							B	B	
Approach Delay (s/veh)		11.6									15.8	
Approach LOS		B									B	
Queue Length 50th (ft)		147	3							28	43	
Queue Length 95th (ft)		#355	19							71	70	
Internal Link Dist (ft)		280			272				72		117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		1174	1006							679	1341	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.72	0.10							0.25	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 13.1		Intersection LOS: B	

Intersection Capacity Utilization 60.4%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 45: Locust St & Coal Ave



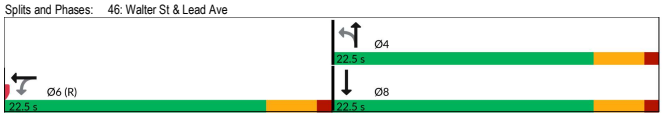
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Future Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.946	
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	1893	0	0	1870	0	0	1782	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	1893	0	0	1899	0	0	1782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	24	964	16	3	6	0	0	6	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1004	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.57			0.03			0.03	
Control Delay (s/veh)					5.5			23.4			13.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					5.5			23.4			13.4	
LOS					A			C			B	
Approach Delay (s/veh)					5.5			23.4			13.4	
Approach LOS					A			C			B	
Queue Length 50th (ft)					3			2			1	
Queue Length 95th (ft)					#440			m10			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					1750			759			715	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.57			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Future Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.999						0.908				
Flt Protected											0.994	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1725	0	0	1889	0
Flt Permitted											0.957	
Satd. Flow (perm)	0	1898	0	0	0	0	0	1725	0	0	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						15				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		844			715			226			362	
Travel Time (s)		19.2			16.3			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	869	4	0	0	0	0	7	15	4	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	876	0	0	0	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		38.2						8.0			8.0	
Actuated g/C Ratio		0.85						0.18			0.18	
v/c Ratio		0.54						0.07			0.11	
Control Delay (s/veh)		5.7						11.1			18.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		5.7						11.1			18.2	
LOS		A						B			B	
Approach Delay (s/veh)		5.7						11.1			18.2	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			9	
Queue Length 95th (ft)		240						15			m18	
Internal Link Dist (ft)		764			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1611						699			727	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.54						0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Future Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	1900	1615	0	1805	3610	0	0	3610
Flt Permitted				0.950				0.340				
Satd. Flow (perm)	0	0	0	1803	1900	1583	0	646	3610	0	0	3610
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						52						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	73	806	70	1	108	438	0	0	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	806	70	0	109	438	0	0	553
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	144
Future Volume (vph)	144
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	117
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	150
Shared Lane Traffic (%)	
Lane Group Flow (vph)	150
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				43.2	43.2	43.2	26.4	26.4	50.4			50.4
Total Split (s)				43.2	43.2	43.2	31.9	31.9	50.4			50.4
Total Split (%)				34.4%	34.4%	34.4%	25.4%	25.4%	40.2%			40.2%
Maximum Green (s)				38.2	38.2	38.2	27.4	27.4	45.9			45.9
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				61.4	61.4	61.4		50.1	45.9			45.9
Actuated g/C Ratio				0.49	0.49	0.49		0.40	0.37			0.37
v/c Ratio				0.08	0.87	0.09		0.37	0.33			0.42
Control Delay (s/veh)				17.5	40.1	6.8		28.8	29.6			31.0
Queue Delay				0.0	0.0	0.0		0.0	0.9			0.0
Total Delay (s/veh)				17.5	40.1	6.8		28.8	30.6			31.0
LOS				B	D	A		C	C			C
Approach Delay (s/veh)					36.0				30.2			26.2
Approach LOS					D				C			C
Queue Length 50th (ft)				31	565	7		52	134			175
Queue Length 95th (ft)				58	#823	33		90	178			227
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				881	929	800		630	1320			1320
Starvation Cap Reductn				0	0	0		0	597			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.08	0.87	0.09		0.17	0.61			0.42

Intersection Summary
Area Type: Other
Cycle Length: 125.5
Actuated Cycle Length: 125.5
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.23
Control Delay (s/veh)	8.6
Queue Delay	0.0
Total Delay (s/veh)	8.6
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	17
Queue Length 95th (ft)	63
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	649
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.23

Intersection Summary

Intersection Signal Delay (s/veh): 31.4 Intersection LOS: C
Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 48: Broadway Blvd & Lead Ave

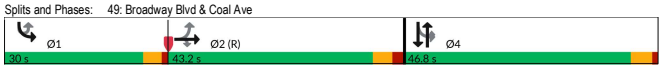
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Future Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.98		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	0	1805	3610
Flt Permitted	0.950										0.383	
Satd. Flow (perm)	1796	3610	1576	0	0	0	0	3610	1591	0	727	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			80						64			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			261			421				359
Travel Time (s)		10.8			5.9			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	688	80	0	0	0	0	488	60	2	95	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	688	80	0	0	0	0	488	60	0	97	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7					41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	37.7	37.7	37.7					41.8	41.8		67.8	41.8
Actuated g/C Ratio	0.31	0.31	0.31					0.35	0.35		0.57	0.35
v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.42
Control Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	31.2
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	1.4
Total Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	32.5
LOS	C	D	A					C	A		B	C
Approach Delay (s/veh)		34.1						27.9				29.4
Approach LOS		C						C				C
Queue Length 50th (ft)	28	236	0					148	0		30	164
Queue Length 95th (ft)	59	301	36					196	28		53	215
Internal Link Dist (ft)		395			181			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	564	1134	549					1257	595		639	1257
Starvation Cap Reductn	0	0	0					0	0		0	501
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.70

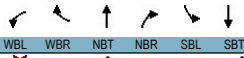
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.9		Intersection LOS: C	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave



Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	113	490
Future Volume (vph)	42	46	513	33	113	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.991
Satd. Flow (prot)	1726	0	1885	0	0	1883
Flt Permitted	0.977					0.991
Satd. Flow (perm)	1726	0	1885	0	0	1883
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	118	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	628
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	77.9%	ICU Level of Service D	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990			0.974			0.996			0.986	
Flt Protected		0.992			0.990			0.998			0.997	
Satd. Flow (prot)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.992			0.990			0.998			0.997	
Satd. Flow (perm)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5			2		2	2			2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	106	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.5%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.968			0.997			0.997	
Flt Protected		0.998			0.986		0.950			0.950		
Satd. Flow (prot)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.998			0.986		0.950			0.950		
Satd. Flow (perm)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	99	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.7%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	87	11	15	15	6	2
Future Volume (vph)	87	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.985				0.966	
Flt Protected	0.957			0.976		
Satd. Flow (prot)	1791	0	0	1854	1835	0
Flt Permitted	0.957			0.976		
Satd. Flow (perm)	1791	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	91	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.7%	ICU Level of Service A	
Analysis Period (min)	15		

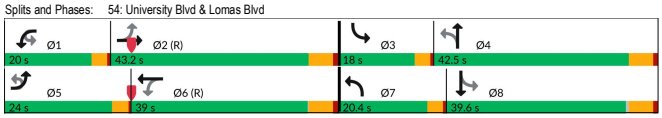
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

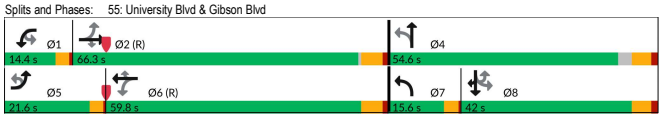
Intersection Summary			
Area Type:	Other		
Cycle Length: 139			
Actuated Cycle Length: 139			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	482	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	482	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.92			1.00		0.99	0.96		
Frt				0.850			0.994			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3585	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	268	1900	1489	0	500	3585	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	502	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	523	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.87	0.47	0.09		0.68	0.37		0.22	0.80		
Control Delay (s/veh)		919.7	28.1	1.7		102.7	30.0		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		919.7	28.1	1.7		102.7	30.0		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			236.4				35.5			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~238	282	0		35	169		28	193		
Queue Length 95th (ft)		#401	410	12		#104	217		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		55	938	786		69	1409		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.87	0.47	0.09		0.62	0.37		0.18	0.66		

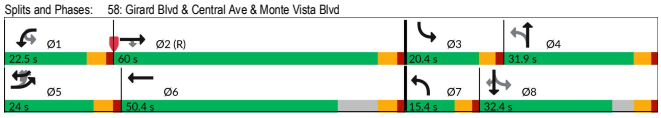
Intersection Summary
Area Type: Other
Cycle Length: 134.8
Actuated Cycle Length: 134.8
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.87

Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 107.2 Intersection LOS: F
Intersection Capacity Utilization 83.8% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 50.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1092	0	0	0
Future Volume (vph)	0	0	1092	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	1138	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1138	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.8%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)	1	1		1								4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

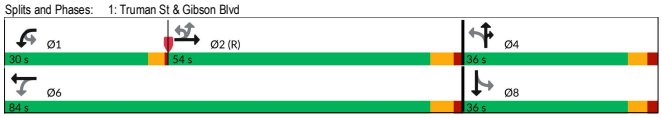
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	

Intersection Summary	

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4 Intersection LOS: B
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

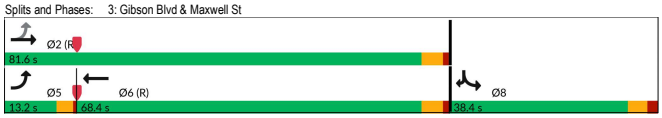
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39

Intersection Signal Delay (s/veh): 5.2 Intersection LOS: A
Intersection Capacity Utilization 44.8% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	

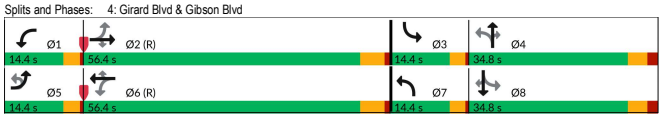
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection Signal Delay (s/veh): 19.4		Intersection LOS: B	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

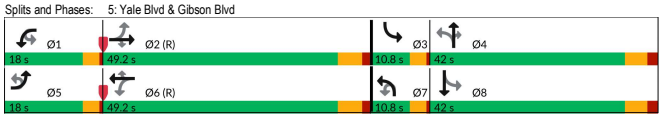
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

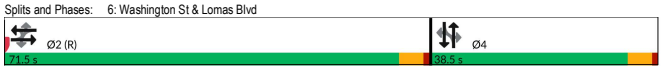
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.4	Intersection LOS: B
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

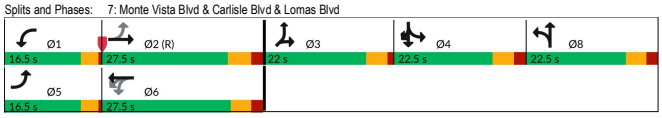
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			350	
Travel Time (s)	17.3			6.8	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			270	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

Intersection Summary

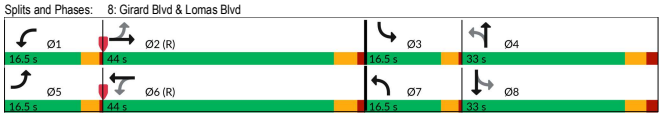
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay (s/veh): 21.4 Intersection LOS: C
Intersection Capacity Utilization 69.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

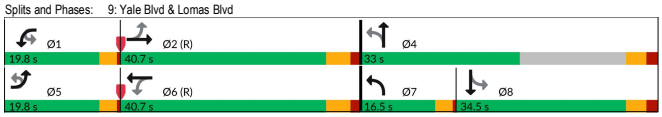
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08
Intersection Summary		

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



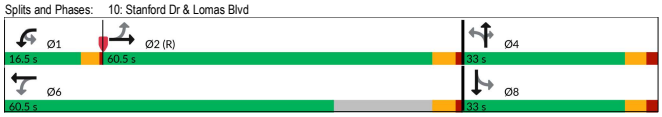
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

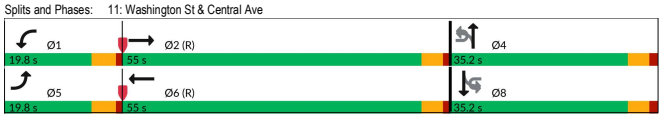
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	78	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	78	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			697			3147
Travel Time (s)		26.6				18.1			15.8			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	83	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	83	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.69	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		72.4	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		72.4	52.4		31.2	42.3
LOS	D	B			D	A		E	D		C	D
Approach Delay (s/veh)		16.5				10.3			59.2			41.2
Approach LOS		B				B			E			D
Queue Length 50th (ft)	18	25			12	56		57	106		12	119
Queue Length 95th (ft)	44	193			33	110		107	166		32	182
Internal Link Dist (ft)		1288				848			617			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.35	0.31		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 30.7		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

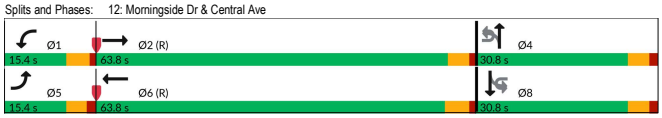
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	308	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	308	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998							0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1900	0	0	1832	0	0
Flt Permitted										0.936		
Satd. Flow (perm)	0	1880	1895	0	0	1886	1900	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	328	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	329	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.21			0.36		
Control Delay (s/veh)		44.9	2.3			60.7	3.0			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			60.7	3.0			49.7		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			4.4				3.5			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m9	142			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1588			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.21			0.12		

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 10.0		Intersection LOS: B	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	295	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	295	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	818	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	314	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	314	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.29	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.5	16.0	0.2		78.9	18.1	0.2	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.5	16.0	0.2		78.9	18.1	0.2	29.0	51.2		30.0
LOS		E	B	A		E	B	A	C	D		C
Approach Delay (s/veh)			21.5				24.5			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		31	85	0	12	123		19
Queue Length 95th (ft)		65	91	1		71	203	1	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.29	0.01	0.09	0.33		0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 33.7		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Carlisle Blvd & Central Ave

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	309	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	309	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996							0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1900	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1878	1891	0	0	1900	1900	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	329	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	330	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.19			0.17		
Control Delay (s/veh)		52.8	1.8			44.9	1.3			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			44.9	1.3			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				2.8			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			8	0			11		
Queue Length 95th (ft)		25	45			m31	26			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		186	1711			188	1723			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.19			0.05		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.19

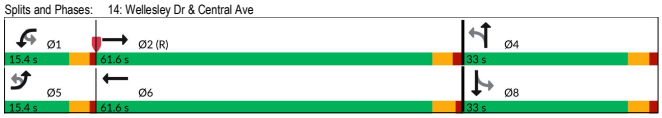
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 5.8		Intersection LOS: A	
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	295	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	295	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.997			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1893	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1893	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	314	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	321	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.19			0.18		
Control Delay (s/veh)		48.6	2.5			44.9	1.0			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			44.9	1.0			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.3			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			7	0			14		
Queue Length 95th (ft)		15	85			27	27			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1721			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.19			0.06		

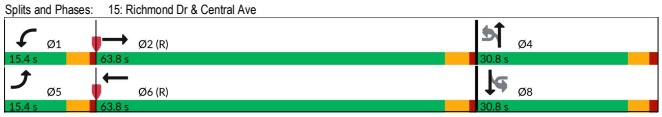
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.19	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary	

Intersection Signal Delay (s/veh): 5.4	Intersection LOS: A
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	366	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	366	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.989			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3563	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1533	3577	0	0	1886	3563	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				11			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	389	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	419	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.15			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.2			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.2			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.0			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	75			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		228	3070			257	2874			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.15			0.03		

Intersection Summary

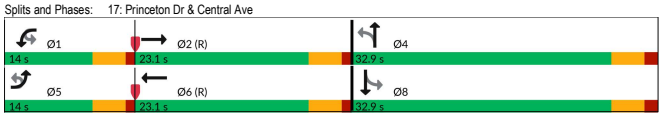
Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.18

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.7	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	384	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	384	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	409	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	414	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

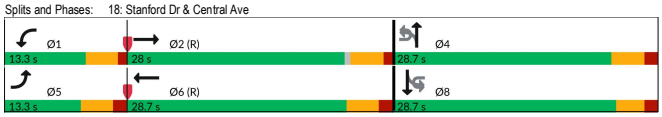
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.13			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.3			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	68			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.13			0.04		0.01

Intersection Summary	
Area Type:	Other
Cycle Length: 70.7	
Actuated Cycle Length: 70.7	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.13	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	
Intersection Summary		

Intersection Signal Delay (s/veh): 5.1	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



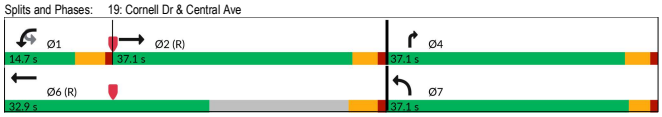
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	363	20	12
Future Volume (vph)	346	31	2	26	363	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	386	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	386	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.12	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				3.7	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	26	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.12	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.0	Intersection LOS: A
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	177	111	271	6	199	19	61	7	12
Future Volume (vph)	1	11	281	177	111	271	6	199	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.942			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3358	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.434			0.744	
Satd. Flow (perm)	0	1711	3358	0	1785	3596	0	816	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			112			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1274			105
Travel Time (s)			32.1			17.0			34.7			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	188	118	288	6	212	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	487	0	118	294	0	212	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	86.9		14.4	100.0		23.6	21.3	21.3	10.9	8.1
Actuated g/C Ratio		0.06	0.62		0.10	0.71		0.17	0.15	0.15	0.08	0.06
v/c Ratio		0.13	0.23		0.63	0.11		0.86	0.07	0.18	0.06	0.18
Control Delay (s/veh)		54.8	9.9		74.9	8.1		84.4	50.4	1.1	45.7	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		54.8	9.9		74.9	8.1		84.4	50.4	1.1	45.7	50.5
LOS		D	A		E	A		F	D	A	D	D
Approach Delay (s/veh)			11.1			27.3			63.9			49.2
Approach LOS			B			C			E			D
Queue Length 50th (ft)		10	76		105	38		175	15	0	5	11
Queue Length 95th (ft)		m28	138		166	81		#280	42	0	19	39
Internal Link Dist (ft)			1332			670			1194			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2127		296	2568		250	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.23		0.40	0.11		0.85	0.04	0.13	0.04	0.05

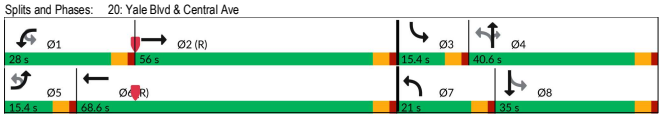
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 30.0	Intersection LOS: C
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	326	19	4	34	328	120	27	372	42	110
Future Volume (vph)	1	26	326	19	4	34	328	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97	0.99		0.98	1.00		0.99
Frt			0.992				0.960			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	3409	0	1805	5095	0	1805
Flt Permitted		0.351				0.222			0.530			0.247
Satd. Flow (perm)	0	663	1883	0	0	407	3409	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				41			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	347	20	4	36	349	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	367	0	0	40	477	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.9			19.8	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.41	0.37			0.70	0.24		0.14	0.69		0.49
Control Delay (s/veh)		73.3	25.2			102.7	15.0		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.3	25.2			102.7	15.0		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.7				21.8			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	204			33	130		20	139		86
Queue Length 95th (ft)		57	355			m67	m160		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		85	981			61	1977		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.34	0.37			0.66	0.24		0.09	0.34		0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

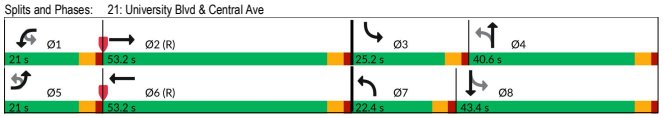
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	

Intersection Summary

Intersection Signal Delay (s/veh): 39.8		Intersection LOS: D	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	342	249	6	56	352	0	73	0	33	0
Future Volume (vph)	3	0	342	249	6	56	352	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.95		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.539				0.486			0.950			
Satd. Flow (perm)	0	1024	1900	1538	0	916	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							694	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	364	265	6	60	374	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	364	265	0	66	374	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.27	0.23		0.09	0.25		0.32		0.02	
Control Delay (s/veh)		3.7	8.1	1.4		3.7	5.2		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.1	1.4		3.7	5.2		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			5.3				5.0			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	96	0		10	63		46		0	
Queue Length 95th (ft)		3	148	28		20	144		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		939	1351	1170		810	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.27	0.23		0.08	0.25		0.15		0.02	

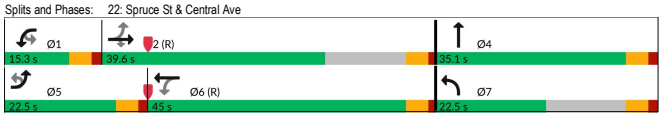
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary	

Intersection Signal Delay (s/veh): 7.5	Intersection LOS: A
Intersection Capacity Utilization 49.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	264	90	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	264	90	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	0.99		1.00	1.00		1.00	0.99
Frt				0.850		0.962			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	1900	1615	1805	3448	0	1805	1853	0	1805	1734
Flt Permitted		0.499			0.557			0.693			0.711	
Satd. Flow (perm)	0	941	1900	1568	1054	3448	0	1314	1853	0	1349	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		59			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			412			375			421			261
Travel Time (s)			9.4			8.5			9.6			5.9
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	281	96	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	13.0%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		70.6	69.2	69.2	66.9	63.5		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.78	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.22	0.01	0.01	0.15		0.22	0.35		0.14	0.43
Control Delay (s/veh)		2.5	3.8	0.0	2.4	4.3		38.7	35.9		36.5	25.1
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.8	0.0	2.4	4.3		38.7	35.9		36.5	25.1
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			3.4			4.3			36.8			27.0
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	35	0	1	26		16	32		10	24
Queue Length 95th (ft)		18	106	0	3	51		41	69		30	68
Internal Link Dist (ft)			332			295			341			181
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		962	1523	1272	919	2554		373	533		382	529
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.22	0.01	0.01	0.15		0.08	0.13		0.05	0.19

Intersection Summary

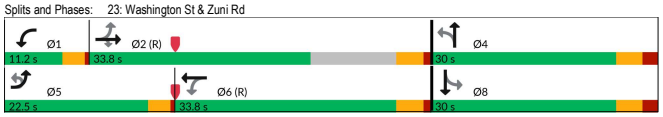
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 9.7	Intersection LOS: A
Intersection Capacity Utilization 43.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

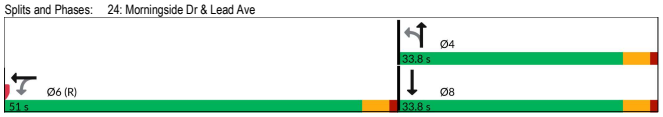


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	375	6	10	12	0	0	11	38
Future Volume (vph)	0	0	0	2	375	6	10	12	0	0	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.896	
Flt Protected								0.978				
Satd. Flow (prot)	0	0	0	0	1896	0	0	1858	0	0	1667	0
Flt Permitted								0.921				
Satd. Flow (perm)	0	0	0	0	1896	0	0	1750	0	0	1667	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	2	399	6	11	13	0	0	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	407	0	0	24	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.39			0.04			0.09	
Control Delay (s/veh)					12.4			18.8			8.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.4			18.8			8.8	
LOS					B			B			A	
Approach Delay (s/veh)					12.4			18.8			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					116			8			4	
Queue Length 95th (ft)					178			25			27	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1040			604			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.39			0.04			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 41.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



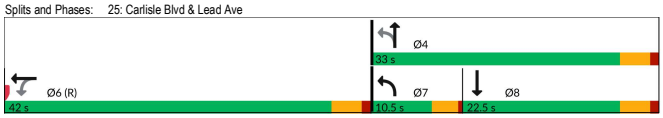
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	402	17	87	149	0	0	161	36
Future Volume (vph)	0	0	0	33	402	17	87	149	0	0	161	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.995						0.975	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1881	0	1805	1900	0	0	1852	0
Flt Permitted					0.996		0.342					
Satd. Flow (perm)	0	0	0	0	1881	0	650	1900	0	0	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	35	428	18	93	159	0	0	171	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	481	0	93	159	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.3		21.7	20.7			12.4	
Actuated g/C Ratio					0.60		0.29	0.28			0.17	
v/c Ratio					0.42		0.33	0.30			0.66	
Control Delay (s/veh)					10.8		12.4	14.9			36.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					10.8		12.4	14.9			36.8	
LOS					B		B	B			D	
Approach Delay (s/veh)					10.8			14.0			36.8	
Approach LOS					B			B			D	
Queue Length 50th (ft)					115		10	23			86	
Queue Length 95th (ft)					215		28	38			141	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1138		295	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.42		0.32	0.22			0.46	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B

Intersection Capacity Utilization 54.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Future Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.977						0.979				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1853	0	1805	1900	0
Flt Permitted		0.996								0.371		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1853	0	705	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	338	76	0	0	0	0	214	40	14	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	0	0	0	254	0	14	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

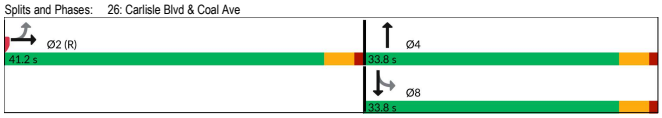
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3		14.3	14.3	
Actuated g/C Ratio		0.69						0.19		0.19	0.19	
v/c Ratio		0.36						0.70		0.10	0.53	
Control Delay (s/veh)		6.3						36.3		41.1	47.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		6.3						36.3		41.1	47.7	
LOS		A						D		D	D	
Approach Delay (s/veh)		6.3						36.3			47.2	
Approach LOS		A						D			D	
Queue Length 50th (ft)		68						105		7	96	
Queue Length 95th (ft)		147						161		m16	160	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1275						733		275	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.36						0.35		0.05	0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 23.8	Intersection LOS: C
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Future Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.890				
Flt Protected		0.999									0.986	
Satd. Flow (prot)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Flt Permitted		0.999									0.986	
Satd. Flow (perm)	0	1898	0	0	0	0	0	1691	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			722			657			532	
Travel Time (s)		31.0			16.4			14.9			12.1	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	389	0	0	0	0	0	10	43	4	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	0	0	0	0	53	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

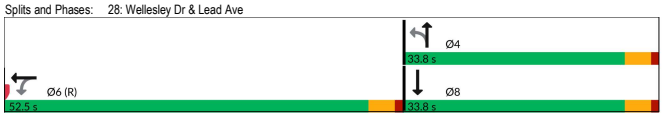
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	569	7	22	16	0	0	11	13
Future Volume (vph)	0	0	0	6	569	7	22	16	0	0	11	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.927	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	1895	0	0	1847	0	0	1730	0
Flt Permitted								0.885				
Satd. Flow (perm)	0	0	0	0	1895	0	0	1682	0	0	1730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	6	605	7	23	17	0	0	12	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	618	0	0	40	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.59			0.07			0.04	
Control Delay (s/veh)					15.4			19.8			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					15.4			19.8			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					15.4			19.8			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					206			15			4	
Queue Length 95th (ft)					306			36			21	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1054			571			596	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.59			0.07			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 15.6		Intersection LOS: B	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Future Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.999						0.946				
Flt Protected		0.999									0.976	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1782	0	0	1854	0
Flt Permitted		0.999									0.942	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1782	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	526	6	0	0	0	0	6	4	5	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	0	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	
v/c Ratio		0.52						0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		14.1						15.7			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		14.1						15.7			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		14.1						15.7			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		172						2			4	
Queue Length 95th (ft)		258						13			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1054						607			607	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.02			0.02	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.52
Intersection Signal Delay (s/veh): 14.3 Intersection LOS: B
Intersection Capacity Utilization 41.3% ICU Level of Service A
Analysis Period (min) 15

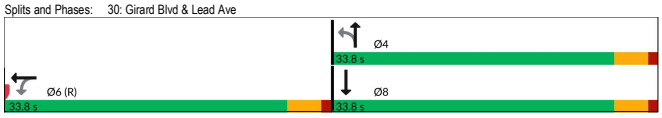
Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	321	31	45	132	0	0	96	50
Future Volume (vph)	0	0	0	26	321	31	45	132	0	0	96	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.989						0.954	
Flt Protected					0.997			0.987				
Satd. Flow (prot)	0	0	0	0	1870	0	0	1875	0	0	1799	0
Flt Permitted					0.997			0.874				
Satd. Flow (perm)	0	0	0	0	1870	0	0	1660	0	0	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	28	341	33	48	140	0	0	102	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	402	0	0	188	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.4			12.2			12.2	
Actuated g/C Ratio					0.69			0.18			0.18	
v/c Ratio					0.31			0.63			0.42	
Control Delay (s/veh)					5.6			34.5			19.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					5.6			34.5			19.6	
LOS					A			C			B	
Approach Delay (s/veh)					5.6			34.5			19.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)					52			73			39	
Queue Length 95th (ft)					115			121			79	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1286			719			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.31			0.26			0.19	

Intersection Summary
Area Type: Other
Cycle Length: 67.6
Actuated Cycle Length: 67.6
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay (s/veh): 15.8 Intersection LOS: B
Intersection Capacity Utilization 49.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 30: Girard Blvd & Lead Ave

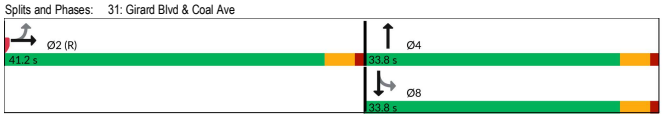


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Future Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993						0.977				
Flt Protected		0.996									0.992	
Satd. Flow (prot)	0	1877	0	0	0	0	0	1849	0	0	1885	0
Flt Permitted		0.996									0.929	
Satd. Flow (perm)	0	1877	0	0	0	0	0	1849	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	423	26	0	0	0	0	148	31	19	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	489	0	0	0	0	0	179	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		54.5						11.5			11.5	
Actuated g/C Ratio		0.73						0.15			0.15	
v/c Ratio		0.36						0.60			0.46	
Control Delay (s/veh)		16.2						35.0			33.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.2						35.0			33.7	
LOS		B						C			C	
Approach Delay (s/veh)		16.2						35.0			33.7	
Approach LOS		B						C			C	
Queue Length 50th (ft)		205						71			54	
Queue Length 95th (ft)		313						122			95	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1366						732			689	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.36						0.24			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



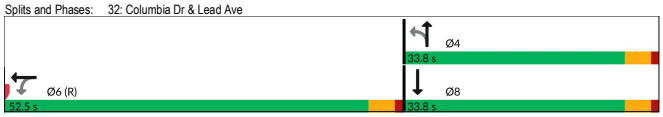
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	721	15	21	8	0	0	7	21
Future Volume (vph)	0	0	0	15	721	15	21	8	0	0	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.898	
Flt Protected					0.999			0.966				
Satd. Flow (prot)	0	0	0	0	1892	0	0	1835	0	0	1706	0
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	1892	0	0	1644	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	767	16	22	9	0	0	7	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	799	0	0	31	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.76			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					20.6			19.7			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.6			19.7			10.2	
LOS					C			B			B	
Approach Delay (s/veh)					20.6			19.7			10.2	
Approach LOS					C			B			B	
Queue Length 50th (ft)					310			11			3	
Queue Length 95th (ft)					464			30			20	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			558			593	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.76			0.06			0.05	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.76
Intersection Signal Delay (s/veh): 20.2 Intersection LOS: C
Intersection Capacity Utilization 55.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 32: Columbia Dr & Lead Ave



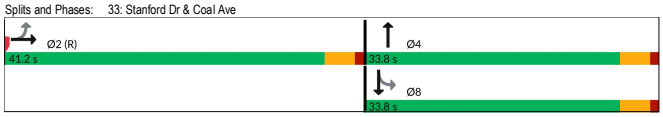
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Future Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.998						0.907				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	1892	0	0	0	0	0	1688	0	0	1849	0
Flt Permitted		0.998									0.939	
Satd. Flow (perm)	0	1892	0	0	0	0	0	1688	0	0	1782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						9				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	507	6	0	0	0	0	4	9	5	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	532	0	0	0	0	0	13	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.57						0.02			0.01	
Control Delay (s/veh)		16.7						9.7			14.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		16.7						9.7			14.1	
LOS		B						A			B	
Approach Delay (s/veh)		16.7						9.7			14.1	
Approach LOS		B						A			B	
Queue Length 50th (ft)		166						1			3	
Queue Length 95th (ft)		258						11			11	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		926						664			696	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.57						0.02			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.57
Intersection Signal Delay (s/veh): 16.5 Intersection LOS: B
Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave

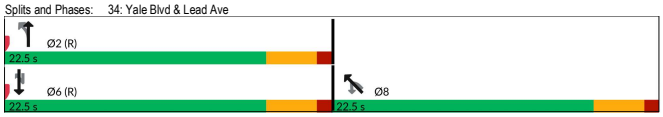


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	67	104	0	0	71	90	0	0	0	88	597	15
Future Volume (vph)	67	104	0	0	71	90	0	0	0	88	597	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.996	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1855	0
Flt Permitted	0.708									0.950		
Satd. Flow (perm)	1319	1863	0	0	1863	1583	0	0	0	1770	1855	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						96					3	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			111			172	
Travel Time (s)		23.2			29.0			2.5			3.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	71	111	0	0	76	96	0	0	0	94	635	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	111	0	0	76	96	0	0	0	94	651	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.13	0.15			0.10	0.14				0.13	0.88	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.3	5.2			9.0	3.2				9.2	29.5	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.3	5.2			9.0	3.2				9.2	29.5	
LOS	A	A			A	A				A	C	
Approach Delay (s/veh)		5.2			5.7						26.9	
Approach LOS		A			A						C	
Queue Length 50th (ft)	5	8			12	0				15	146	
Queue Length 95th (ft)	13	18			30	19				35	#319	
Internal Link Dist (ft)		772			1194				31		92	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	527	745			745	690				708	743	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.13	0.15			0.10	0.14				0.13	0.88	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.88
Intersection Signal Delay (s/veh): 20.0 Intersection LOS: C
Intersection Capacity Utilization 53.3% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 34: Yale Blvd & Lead Ave



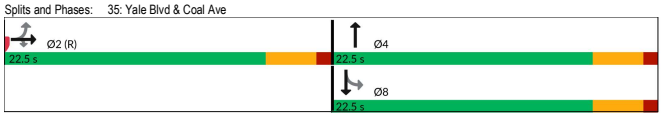
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Future Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98							1.00		
Frt			0.850					0.937				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1780	0	1805	1900	0
Flt Permitted	0.950									0.438		
Satd. Flow (perm)	1805	3610	1577	0	0	0	0	1780	0	831	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76					117				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	333	76	0	0	0	0	165	145	15	157	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	333	76	0	0	0	0	310	0	15	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	25.0	25.0	25.0					11.0		11.0	11.0	
Actuated g/C Ratio	0.56	0.56	0.56					0.24		0.24	0.24	
v/c Ratio	0.03	0.17	0.08					0.59		0.07	0.34	
Control Delay (s/veh)	6.1	6.0	2.5					13.5		14.5	17.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	6.1	6.0	2.5					13.5		14.5	17.2	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		5.4						13.5			17.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)	3	17	0					43		3	30	
Queue Length 95th (ft)	13	43	15					83		11	82	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	1002	2004	909					782		332	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.03	0.17	0.08					0.40		0.05	0.21	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 10.3	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

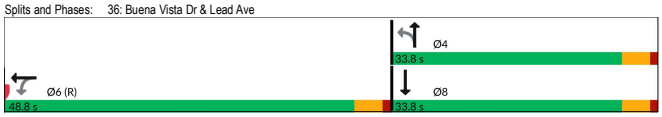


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	673	4	30	4	0	0	6	11
Future Volume (vph)	0	0	0	16	673	4	30	4	0	0	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.999						0.910	
Flt Protected					0.999			0.957				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1818	0	0	1729	0
Flt Permitted					0.999			0.826				
Satd. Flow (perm)	0	0	0	0	3602	0	0	1569	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7			3			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	17	716	4	32	4	0	0	6	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	737	0	0	36	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.38			0.06			0.03	
Control Delay (s/veh)					11.9			18.1			11.3	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.9			18.1			11.3	
LOS					B			B			B	
Approach Delay (s/veh)					11.9			18.1			11.3	
Approach LOS					B			B			B	
Queue Length 50th (ft)					109			12			2	
Queue Length 95th (ft)					147			32			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1932			556			621	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.38			0.06			0.03	

Intersection Summary	
Area Type:	Other
Cycle Length: 82.6	
Actuated Cycle Length: 82.6	
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay (s/veh): 12.1	Intersection LOS: B
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 36: Buena Vista Dr & Lead Ave

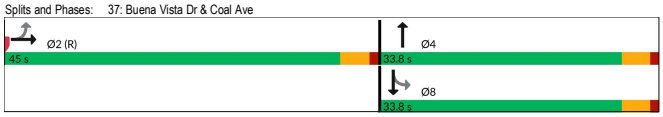


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	337	52	0	0	0	0	20	6	9	19	0
Future Volume (vph)	23	337	52	0	0	0	0	20	6	9	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						1.00			1.00	
Frt		0.981						0.970				
Flt Protected		0.997									0.984	
Satd. Flow (prot)	0	3514	0	0	0	0	0	1837	0	0	1870	0
Flt Permitted		0.997									0.878	
Satd. Flow (perm)	0	3512	0	0	0	0	0	1837	0	0	1665	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29						6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	24	359	55	0	0	0	0	21	6	10	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	438	0	0	0	0	0	27	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		72.0						8.0			8.0	
Actuated g/C Ratio		0.91						0.10			0.10	
v/c Ratio		0.14						0.14			0.18	
Control Delay (s/veh)		1.2						29.1			35.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.2						29.1			35.2	
LOS		A						C			D	
Approach Delay (s/veh)		1.2						29.1			35.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						10			14	
Queue Length 95th (ft)		27						33			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		3211						686			619	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.14						0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 4.7		Intersection LOS: A	
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



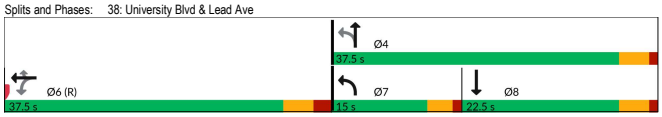
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	50	553	106	32	203	0	0	256	51
Future Volume (vph)	0	0	0	50	553	106	32	203	0	0	256	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850					0.975	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	3596	1615	1805	5187	0	0	5057	0
Flt Permitted					0.996		0.481					
Satd. Flow (perm)	0	0	0	0	3595	1589	914	5187	0	0	5057	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113					52	
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		48.6			22.7			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	53	588	113	34	216	0	0	272	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	641	113	34	216	0	0	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6		6	4					
Detector Phase				6	6	6	7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0			8.0	
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%			30.0%	
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0			18.0	
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5			3.5	
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)					5.5	5.5	4.0	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	Max			Max	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				23.0	23.0	23.0		10.0			10.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)					32.0	32.0	33.5	33.0			29.1	
Actuated g/C Ratio					0.43	0.43	0.45	0.44			0.39	
v/c Ratio					0.42	0.15	0.07	0.09			0.16	
Control Delay (s/veh)					16.1	3.5	12.2	12.4			13.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)					16.1	3.5	12.2	12.4			13.8	
LOS					B	A	B	B			B	
Approach Delay (s/veh)					14.2			12.4			13.8	
Approach LOS					B			B			B	
Queue Length 50th (ft)					105	0	9	20			26	
Queue Length 95th (ft)					147	27	23	33			54	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1533	742	538	2282			1996	
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.42	0.15	0.06	0.09			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			

Intersection Signal Delay (s/veh): 13.8	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



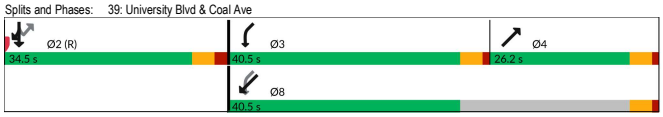
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	39	323	102	0	203	68	50	245	0
Future Volume (vph)	0	0	0	39	323	102	0	203	68	50	245	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.564		
Satd. Flow (perm)	0	0	0	1802	3610	1615	0	5187	1586	1070	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109			124			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	344	109	0	216	72	53	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	41	344	109	0	216	72	53	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		3.0	8.0	
Minimum Split (s)				44.5	44.5	44.5		26.5		26.5	40.5	
Total Split (s)				34.5	34.5	34.5		26.2		40.5	40.5	
Total Split (%)				34.1%	34.1%	34.1%		25.9%		40.0%	40.0%	
Maximum Green (s)				29.0	29.0	29.0		21.7		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				2.0	2.0	2.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				5.5	5.5	5.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		1.5	2.0	
Recall Mode				C-Max	C-Max	C-Max		None		None	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		0.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		10.0		0.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				29.0	29.0	29.0		54.2	101.2	62.2	62.2	
Actuated g/C Ratio				0.29	0.29	0.29		0.54	1.00	0.61	0.61	
v/c Ratio				0.08	0.33	0.20		0.08	0.05	0.08	0.08	
Control Delay (s/veh)				27.0	29.6	6.4		12.1	0.1	8.1	8.0	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				27.0	29.6	6.4		12.1	0.1	8.1	8.0	
LOS				C	C	A		B	A	A	A	
Approach Delay (s/veh)					24.3			9.1			8.0	
Approach LOS					C			A			A	
Queue Length 50th (ft)				19	92	0		24	0	13	23	
Queue Length 95th (ft)				46	131	39		38	0	27	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				516	1034	540		2779	1586	919	3188	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.08	0.33	0.20		0.08	0.05	0.06	0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.33	

Intersection Signal Delay (s/veh): 15.6	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

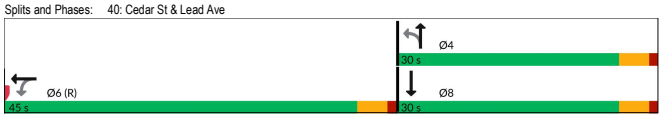


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	654	39	9	168	0	0	14	111
Future Volume (vph)	0	0	0	17	654	39	9	168	0	0	14	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.992						0.880	
Flt Protected					0.999			0.997				
Satd. Flow (prot)	0	0	0	0	3572	0	0	1894	0	0	1650	0
Flt Permitted					0.999			0.981				
Satd. Flow (perm)	0	0	0	0	3572	0	0	1864	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	696	41	10	179	0	0	15	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	755	0	0	189	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.8			12.2			12.2	
Actuated g/C Ratio					0.72			0.16			0.16	
v/c Ratio					0.29			0.63			0.36	
Control Delay (s/veh)					3.5			38.1			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					3.5			38.1			9.9	
LOS					A			D			A	
Approach Delay (s/veh)					3.5			38.1			9.9	
Approach LOS					A			D			A	
Queue Length 50th (ft)					43			83			6	
Queue Length 95th (ft)					62			135			47	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2566			633			638	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.30			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 10.3		Intersection LOS: B	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

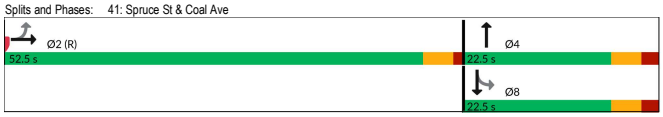


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	515	3	0	0	0	0	3	2	5	7	0
Future Volume (vph)	26	515	3	0	0	0	0	3	2	5	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.946				
Flt Protected		0.998									0.980	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1780	0	0	1862	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	3598	0	0	0	0	0	1780	0	0	1897	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	548	3	0	0	0	0	3	2	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	579	0	0	0	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.17						0.03			0.06	
Control Delay (s/veh)		0.9						26.2			31.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						26.2			31.0	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						26.2			31.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			5	
Queue Length 95th (ft)		42						11			20	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3425						405			429	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.17						0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.17			
Intersection Signal Delay (s/veh): 1.7		Intersection LOS: A	
Intersection Capacity Utilization 33.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



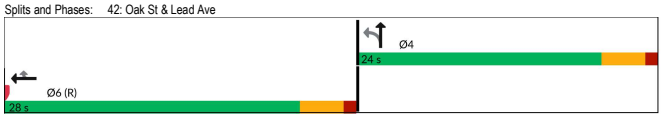
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	308	489	99	585	0	0	0	0
Future Volume (vph)	0	0	0	0	308	489	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						122	105					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	328	520	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	328	520	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					28.8	28.8	14.2	14.2				
Actuated g/C Ratio					0.55	0.55	0.27	0.27				
v/c Ratio					0.11	0.56	0.18	0.63				
Control Delay (s/veh)					6.5	9.4	4.1	19.1				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.5	9.4	4.1	19.1				
LOS					A	A	A	B				
Approach Delay (s/veh)					8.3			16.9				
Approach LOS					A			B				
Queue Length 50th (ft)					15	63	0	87				
Queue Length 95th (ft)					32	173	23	112				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2872	933	742	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.11	0.56	0.14	0.46				

Intersection Summary			
Area Type:	Other		
Cycle Length: 52			
Actuated Cycle Length: 52			
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	407	748	0	0	0	0	0	283	110	0	0	0
Future Volume (vph)	407	748	0	0	0	0	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.958				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	4951	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	4951	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	387							77				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	433	796	0	0	0	0	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	433	796	0	0	0	0	0	418	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	24.9	24.9						10.1				
Actuated g/C Ratio	0.55	0.55						0.22				
v/c Ratio	0.37	0.40						0.36				
Control Delay (s/veh)	2.1	6.5						12.9				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	2.1	6.5						12.9				
LOS	A	A						B				
Approach Delay (s/veh)		5.0						12.9				
Approach LOS		A						B				
Queue Length 50th (ft)	5	52						27				
Queue Length 95th (ft)	33	83						46				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1171	1997						1918				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.37	0.40						0.22				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Intersection Signal Delay (s/veh): 7.0	Intersection LOS: A
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

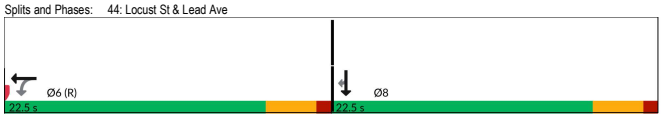
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	314	0	0	0	0	0	533	541
Future Volume (vph)	0	0	0	70	314	0	0	0	0	0	533	541
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.957	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3309	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3309	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				74							143	351
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	74	334	0	0	0	0	0	567	576
Shared Lane Traffic (%)												39%
Lane Group Flow (vph)	0	0	0	74	334	0	0	0	0	0	792	351
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				19.9	19.9						16.1	16.1
Actuated g/C Ratio				0.44	0.44						0.36	0.36
v/c Ratio				0.09	0.21						0.62	0.47
Control Delay (s/veh)				3.2	8.9						11.6	3.8
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				3.2	8.9						11.6	3.8
LOS				A	A						B	A
Approach Delay (s/veh)					7.9						9.2	
Approach LOS					A						A	
Queue Length 50th (ft)				0	28						64	0
Queue Length 95th (ft)				17	48						107	39
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				100								
Base Capacity (vph)				838	1595						1409	798
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.21						0.56	0.44

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 8.8	Intersection LOS: A

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



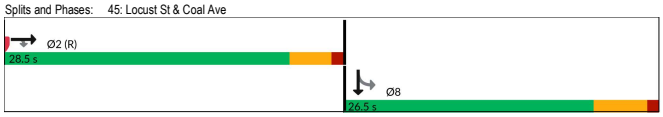
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	711	59	0	0	0	0	0	0	448	88	0
Future Volume (vph)	0	711	59	0	0	0	0	0	0	448	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98							1.00	1.00	
Frt			0.850									
Flt Protected										0.950	0.965	
Satd. Flow (prot)	0	3610	1583	0	0	0	0	0	0	1643	3337	0
Flt Permitted										0.950	0.965	
Satd. Flow (perm)	0	3610	1557	0	0	0	0	0	0	1641	3335	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			63							110	110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	756	63	0	0	0	0	0	0	477	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	756	63	0	0	0	0	0	0	238	333	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		33.3	33.3							11.7	11.7	
Actuated g/C Ratio		0.61	0.61							0.21	0.21	
v/c Ratio		0.35	0.07							0.55	0.42	
Control Delay (s/veh)		6.4	2.2							15.2	13.5	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		6.4	2.2							15.2	13.5	
LOS		A	A							B	B	
Approach Delay (s/veh)		6.1									14.2	
Approach LOS		A									B	
Queue Length 50th (ft)		48	0							41	35	
Queue Length 95th (ft)		104	13							89	58	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		2185	967							694	1341	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.35	0.07							0.34	0.25	

Intersection Summary
Area Type: Other
Cycle Length: 55
Actuated Cycle Length: 55
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55

Intersection Signal Delay (s/veh): 9.4 Intersection LOS: A
Intersection Capacity Utilization 38.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 45: Locust St & Coal Ave

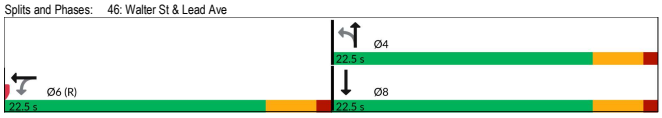


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Future Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.923	
Flt Protected					0.999			0.964				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1832	0	0	1740	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3602	0	0	1900	0	0	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2				2		2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	22	932	6	14	5	0	0	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	960	0	0	19	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases					6			4				
Detector Phase					6	6		4	4		8	
Switch Phase												
Minimum Initial (s)					8.0	8.0		8.0	8.0		8.0	
Minimum Split (s)					22.5	22.5		22.5	22.5		22.5	
Total Split (s)					22.5	22.5		22.5	22.5		22.5	
Total Split (%)					50.0%	50.0%		50.0%	50.0%		50.0%	
Maximum Green (s)					18.0	18.0		18.0	18.0		18.0	
Yellow Time (s)					3.5	3.5		3.5	3.5		3.5	
All-Red Time (s)					1.0	1.0		1.0	1.0		1.0	
Lost Time Adjust (s)						0.0			0.0		0.0	
Total Lost Time (s)						4.5			4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0		2.0	2.0		2.0	
Recall Mode					C-Max	C-Max		None	None		None	
Walk Time (s)					7.0	7.0		7.0	7.0		7.0	
Flash Don't Walk (s)					10.0	10.0		10.0	10.0		10.0	
Pedestrian Calls (#/hr)					0	0		0	0		0	
Act Effct Green (s)						41.6			8.0		8.0	
Actuated g/C Ratio						0.92			0.18		0.18	
v/c Ratio						0.29			0.06		0.02	
Control Delay (s/veh)						1.7			19.6		12.6	
Queue Delay						0.0			0.0		0.0	
Total Delay (s/veh)						1.7			19.6		12.6	
LOS						A			B		B	
Approach Delay (s/veh)						1.7			19.6		12.6	
Approach LOS						A			B		B	
Queue Length 50th (ft)						0			4		1	
Queue Length 95th (ft)						91			19		8	
Internal Link Dist (ft)		1027				1009			282		139	
Turn Bay Length (ft)												
Base Capacity (vph)						3330			760		698	
Starvation Cap Reductn						0			0		0	
Spillback Cap Reductn						0			0		0	
Storage Cap Reductn						0			0		0	
Reduced v/c Ratio						0.29			0.03		0.01	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.29
Intersection Signal Delay (s/veh): 2.1 Intersection LOS: A
Intersection Capacity Utilization 43.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 46: Walter St & Lead Ave



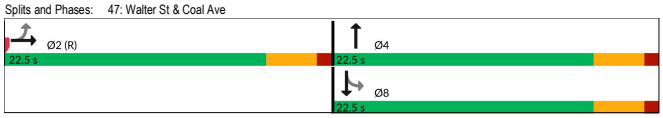
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Future Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.890				
Flt Protected											0.985	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1671	0	0	1872	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1671	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						27				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		827			715			226			362	
Travel Time (s)		18.8			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	651	4	0	0	0	0	6	27	4	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	0	0	0	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.20						0.10			0.04	
Control Delay (s/veh)		1.4						9.5			17.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						9.5			17.0	
LOS		A						A			B	
Approach Delay (s/veh)		1.4						9.5			17.0	
Approach LOS		A						A			B	
Queue Length 50th (ft)		0						1			3	
Queue Length 95th (ft)		50						18			m12	
Internal Link Dist (ft)		747			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						684			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Future Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3574	1615	0	1805	3610	0	0	3574
Flt Permitted				0.950				0.480				
Satd. Flow (perm)	0	0	0	1801	3574	1583	0	912	3610	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						84						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	0	0	43	769	129	2	69	526	0	0	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	43	769	129	0	71	526	0	0	350
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	79
Future Volume (vph)	79
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1588
Right Turn on Red	Yes
Satd. Flow (RTOR)	84
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	84
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (%)				35.0%	35.0%	35.0%	29.0%	29.0%	36.0%			36.0%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	35.1			35.1
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		39.2	35.1			35.1
Actuated g/C Ratio				0.53	0.53	0.53		0.36	0.32			0.32
v/c Ratio				0.04	0.40	0.15		0.20	0.46			0.31
Control Delay (s/veh)				13.5	16.6	6.0		5.9	11.1			29.2
Queue Delay				0.0	0.0	0.0		0.0	0.1			0.0
Total Delay (s/veh)				13.5	16.6	6.0		5.9	11.3			29.2
LOS				B	B	A		A	B			C
Approach Delay (s/veh)					15.0				10.6			24.8
Approach LOS					B				B			C
Queue Length 50th (ft)				15	168	15		7	43			97
Queue Length 95th (ft)				33	216	46		13	55			137
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				956	1899	880		740	1151			1140
Starvation Cap Reductn				0	0	0		0	109			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.04	0.40	0.15		0.10	0.50			0.31

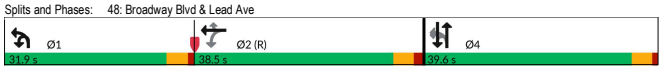
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.15
Control Delay (s/veh)	6.5
Queue Delay	0.0
Total Delay (s/veh)	6.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	35
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	563
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 15.8	Intersection LOS: B
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Future Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		200	0		0	0		130	100		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.97						0.99			
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	1787	3610	0
Flt Permitted	0.950									0.359		
Satd. Flow (perm)	1790	3610	1573	0	0	0	0	3610	1595	675	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64						69			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		475			277			421			359	
Travel Time (s)		10.8			6.3			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		2						4		1	4	
Permitted Phases	2		2						4	4		
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	39.0%	
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	37.9	
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	7.0	
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9	61.4	37.9	
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34	0.56	0.34	
v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	
Control Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	7.9	
LOS	C	C	A					C	A	A	A	
Approach Delay (s/veh)		29.6						26.4			6.9	
Approach LOS		C						C			A	
Queue Length 50th (ft)	34	159	0					148	0	4	20	
Queue Length 95th (ft)	69	211	30					198	30	16	28	
Internal Link Dist (ft)		395			197			341			279	
Turn Bay Length (ft)	100		200						130	100		
Base Capacity (vph)	554	1119	531					1243	594	609	1243	
Starvation Cap Reductn	0	0	0					0	0	0	0	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	43	244
Future Volume (vph)	24	34	1	363	9	43	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.993
Satd. Flow (prot)	1715	0	0	1894	0	0	1887
Flt Permitted	0.979						0.993
Satd. Flow (perm)	1715	0	0	1894	0	0	1887
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	46	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	306
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.971			0.996			0.995	
Flt Protected		0.993			0.989			0.997			0.998	
Satd. Flow (prot)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.993			0.989			0.997			0.998	
Satd. Flow (perm)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	43	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.972			0.975			0.998			0.998	
Flt Protected		0.994			0.978		0.950			0.950		
Satd. Flow (prot)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.994			0.978		0.950			0.950		
Satd. Flow (perm)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2				2		2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	43	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	7	12	11	7	1
Future Volume (vph)	35	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.983	
Flt Protected	0.960			0.975		
Satd. Flow (prot)	1786	0	0	1852	1868	0
Flt Permitted	0.960			0.975		
Satd. Flow (perm)	1786	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	37	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

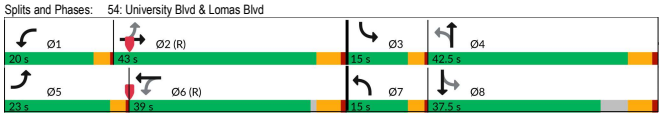
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

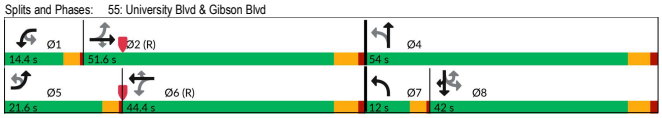
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 20.3		Intersection LOS: C	

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	267	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	267	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.991			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3573	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3573	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	284	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	302	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.24		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	27.1		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	27.1		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.4			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	83		17	161			16
Queue Length 95th (ft)		#219	161	0	33	118		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1275		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.24		0.11	0.54			0.12

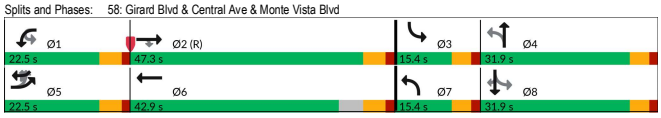
Intersection Summary
Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

Intersection Signal Delay (s/veh): 52.9 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 24.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	774	0	0	0
Future Volume (vph)	0	0	774	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	823	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	823	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.7%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

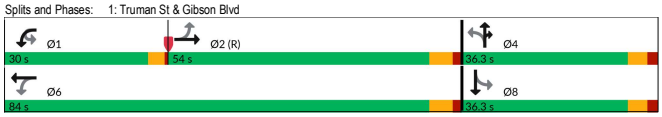
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

Intersection Summary	
Area Type:	Other
Cycle Length: 120.3	
Actuated Cycle Length: 120.3	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

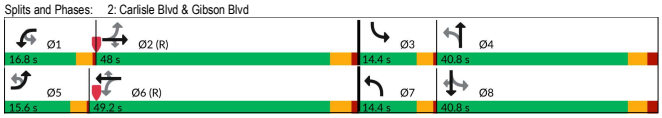
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary

Intersection Signal Delay (s/veh): 5.5 Intersection LOS: A
Intersection Capacity Utilization 51.0% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



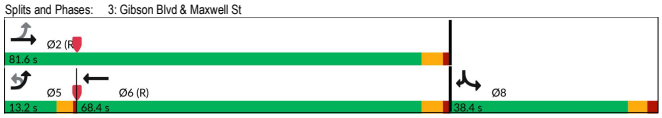
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	

Intersection Capacity Utilization 36.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

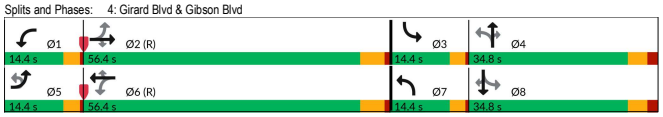
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123.3	
Actuated Cycle Length: 123.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	

Intersection Summary	

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

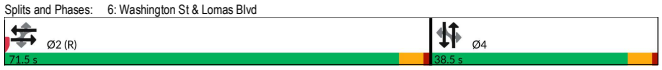
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

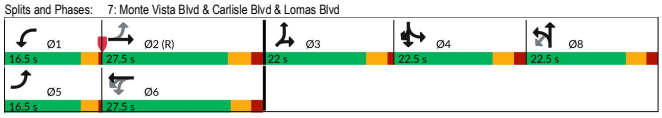
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	
Intersection Summary							

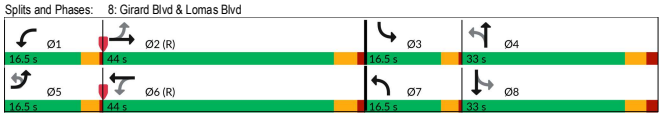
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

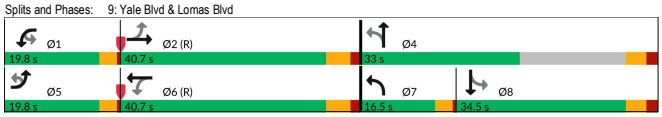
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09

Intersection Summary	

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



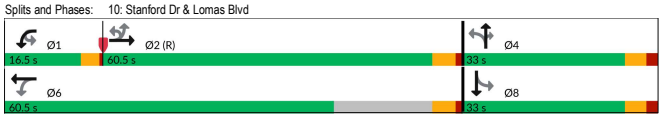
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	107	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	107	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.379			0.362
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	717	1851	0	678
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			698		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	109	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	109	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

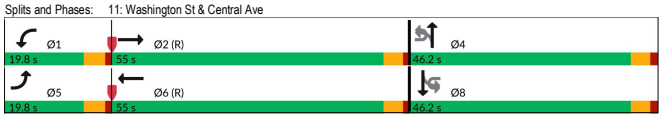
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.5			15.9	75.1		18.5	18.5		18.5
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.37		1.00	0.69		0.21
Control Delay (s/veh)		77.1	15.4			79.8	15.5		135.7	58.4		47.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.4			79.8	15.5		135.7	58.4		47.2
LOS		E	B			E	B		F	E		D
Approach Delay (s/veh)			20.6				21.0			85.6		
Approach LOS			C				C			F		
Queue Length 50th (ft)		27	146			30	160		~88	145		15
Queue Length 95th (ft)		61	289			66	317		#171	210		39
Internal Link Dist (ft)			1288				848			618		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1159			78	1170		244	635		230
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.37		0.45	0.32		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 121			
Actuated Cycle Length: 121			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 62.1%		ICU Level of Service B	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.5	
Actuated g/C Ratio	0.15	
v/c Ratio	0.67	
Control Delay (s/veh)	57.0	
Queue Delay	0.0	
Total Delay (s/veh)	57.0	
LOS	E	
Approach Delay (s/veh)	56.0	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	203	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	
Intersection Summary		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	520	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	520	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.999			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1898	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	701	1888	0	0	1347	1898	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	531	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	536	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

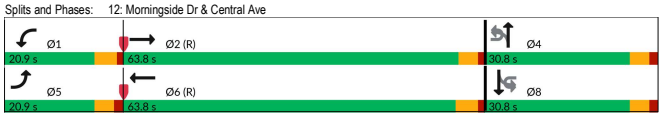
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.38			0.32		
Control Delay (s/veh)		57.4	5.8			49.1	9.6			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.4	5.8			49.1	9.6			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.8			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	161			22		
Queue Length 95th (ft)		52	191			32	314			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1419			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.38			0.11		

Intersection Summary

Area Type: Other
Cycle Length: 115.5
Actuated Cycle Length: 115.5
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 45.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	484	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	484	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.150				0.305			0.395			0.409
Satd. Flow (perm)	0	279	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	494	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	494	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.6	55.9	55.9		14.6	41.4	41.4	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.35	0.35	0.05		0.67	0.70	0.07	0.18	0.62		0.23
Control Delay (s/veh)		264.1	22.7	0.1		84.2	36.8	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		264.1	22.7	0.1		84.2	36.8	0.2	28.8	49.4		30.0
LOS		F	C	A		F	D	A	C	D		C
Approach Delay (s/veh)			66.9				37.9			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	307	0	22	122		31
Queue Length 95th (ft)		#202	278	0		#84	435	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		66	955	825		79	707	653	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.35	0.35	0.05		0.63	0.70	0.07	0.16	0.35		0.22

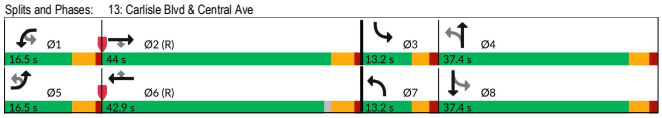
Intersection Summary
Area Type: Other
Cycle Length: 111.1
Actuated Cycle Length: 111.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay (s/veh): 48.9 Intersection LOS: D
Intersection Capacity Utilization 65.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	549	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	549	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.995			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1879	0	0	1749	0	0
Flt Permitted		0.667				0.588				0.912		
Satd. Flow (perm)	0	1242	1877	0	0	1022	1879	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	560	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	580	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.37			0.26		
Control Delay (s/veh)		53.3	3.8			49.5	6.5			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.3	3.8			49.5	6.5			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				8.1			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	70			16		
Queue Length 95th (ft)		41	96			39	298			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		170	1548			143	1561			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.37			0.09		

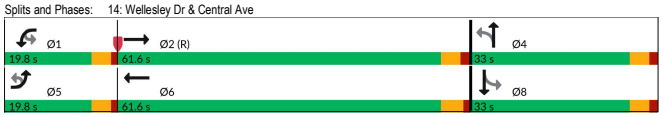
Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	488	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	488	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1877	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1178	1879	0	0	853	1877	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	498	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	505	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

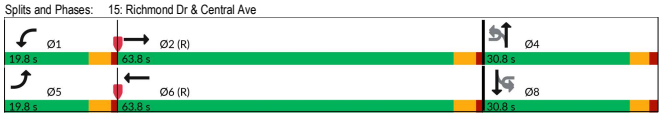
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.34			0.41		
Control Delay (s/veh)		49.1	7.8			64.1	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.1	7.8			64.1	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				6.5			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			20	42			23		
Queue Length 95th (ft)		36	253			52	79			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1502			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.34			0.14		

Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	653	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	653	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.996			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3585	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3585	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				3			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	666	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	686	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.33			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	15.3			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	15.3			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.7			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	134			16		
Queue Length 95th (ft)		#99	81			73	228			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2070			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.33			0.10		

Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

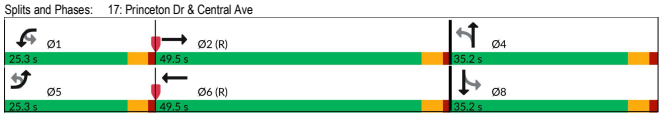
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	

Intersection Summary

Intersection Signal Delay (s/veh): 20.0		Intersection LOS: C	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	651	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	651	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	664	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	669	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.23			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.0	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.0	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.1			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	35			10		5
Queue Length 95th (ft)		43	154			m67	46			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.23			0.08		0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

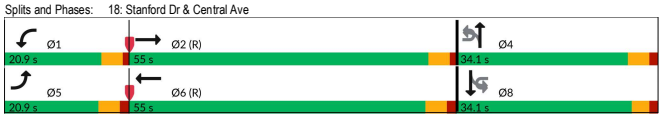
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary	

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



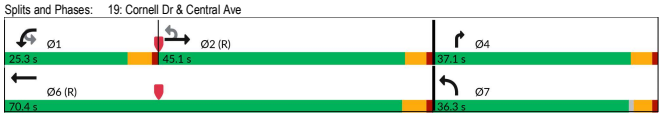
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	643	55	49
Future Volume (vph)	1	587	131	4	59	643	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	656	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	656	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.21	0.38	0.28
Control Delay (s/veh)		17.1			123.8	2.0	53.2	16.8
Queue Delay		0.0			0.0	0.4	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.3	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				13.1	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	34	37	0
Queue Length 95th (ft)		250			#113	56	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1800	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.50	0.10	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 107.5	
Actuated Cycle Length: 107.5	
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	

Intersection Signal Delay (s/veh): 16.5		Intersection LOS: B	
Intersection Capacity Utilization 58.7%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	173	13	124	498	9	231	23	87	12
Future Volume (vph)	4	11	582	173	13	124	498	9	231	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.97				1.00		0.99		0.97	0.99
Frt			0.966				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3382	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.080			0.405			0.742
Satd. Flow (perm)	0	1466	3382	0	0	152	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			31				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1282		
Travel Time (s)			32.1				17.0			35.0		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	177	13	127	508	9	236	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	771	0	0	140	517	0	236	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			50.0	99.2		24.0	19.2	19.2	11.3
Actuated g/C Ratio		0.06	0.36			0.36	0.71		0.17	0.14	0.14	0.08
v/c Ratio		0.16	0.62			2.59	0.20		0.95	0.09	0.27	0.09
Control Delay (s/veh)		52.1	42.6			796.9	9.0		99.3	53.7	4.2	47.1
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		52.1	42.6			796.9	9.0		99.3	53.7	4.2	47.1
LOS		D	D			F	A		F	D	A	D
Approach Delay (s/veh)			42.8				176.9			72.0		
Approach LOS			D				F			E		
Queue Length 50th (ft)		11	249			~218	72		198	17	0	9
Queue Length 95th (ft)		m16	m340			#324	148		#278	47	16	27
Internal Link Dist (ft)			1332				670			1202		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1251			54	2542		250	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.62			2.59	0.20		0.94	0.05	0.18	0.07

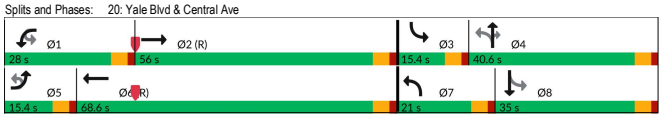
Intersection Summary
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.59

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.0	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	

Intersection Summary

Intersection Signal Delay (s/veh): 96.8 Intersection LOS: F
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	458	18	20	46	488	213	1	32	283	80
Future Volume (vph)	15	49	458	18	20	46	488	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.98	0.99			0.94	0.99	
Frt			0.994				0.954				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1887	0	0	1805	3396	0	0	1805	4971	0
Flt Permitted		0.116				0.109				0.503		
Satd. Flow (perm)	0	220	1887	0	0	202	3396	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				54				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	467	18	20	47	498	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	485	0	0	67	715	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	49.3			36.6	51.4			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.73			1.29	0.56			0.18	0.66	
Control Delay (s/veh)		236.4	47.1			254.5	34.4			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		236.4	47.1			254.5	34.4			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.5				53.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	378			~80	248			23	104	
Queue Length 95th (ft)		#175	525			m#155	m192			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	665			52	1280			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.73			1.29	0.56			0.11	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29

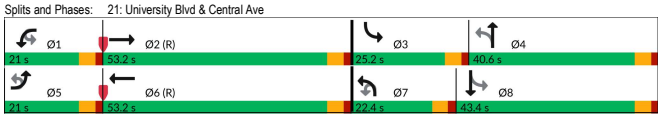
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 57.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	457	168	11	69	536	0	111	0	71	0
Future Volume (vph)	3	0	457	168	11	69	536	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.426				0.408			0.950			
Satd. Flow (perm)	0	809	1900	1563	0	775	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							677	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	466	171	11	70	547	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	466	171	0	81	547	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

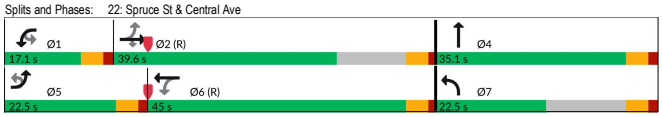
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.37	0.16		0.13	0.39		0.40		0.05	
Control Delay (s/veh)		3.7	9.6	1.5		3.9	6.8		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	9.6	1.5		3.9	6.8		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			7.4				6.4			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	134	0		12	104		67		0	
Queue Length 95th (ft)		3	201	23		23	231		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		773	1251	1088		700	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.37	0.16		0.12	0.39		0.21		0.05	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	473	25	1	19	321	127	35	54	9	60
Future Volume (vph)	5	109	473	25	1	19	321	127	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300		100		0	100		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		1.00	0.99		1.00	1.00		1.00
Frt				0.850			0.957			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1803	1900	1615	0	1803	3427	0	1805	1853	0	1805
Flt Permitted		0.462				0.473			0.484			0.715
Satd. Flow (perm)	0	874	1900	1566	0	896	3427	0	918	1853	0	1357
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				76			74			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			380				354			333		
Travel Time (s)			8.6				8.0			7.6		
Confl. Peds. (#/hr)		3		3		3		3	3		3	1
Confl. Bikes (#/hr)				4				1			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	483	26	1	19	328	130	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	483	26	0	20	458	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1698	0
Flt Permitted		
Satd. Flow (perm)	1698	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	103	
Link Speed (mph)	30	
Link Distance (ft)	362	
Travel Time (s)	8.2	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	22.0	33.8		30.0	30.0		30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.5	22.5	33.8		30.0	30.0		30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	26.1%	26.1%	39.2%		34.8%	34.8%		34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	19.0	19.0	29.3		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		3.5	4.5		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	1.5	4.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		None
Walk Time (s)			7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0	11.0	11.0	10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0	0	0	0		0	0		0
Act Effct Green (s)		66.5	62.7	62.7		62.6	58.2		10.4	10.4		10.4
Actuated g/C Ratio		0.77	0.73	0.73		0.73	0.67		0.12	0.12		0.12
v/c Ratio		0.16	0.35	0.02		0.03	0.20		0.33	0.28		0.38
Control Delay (s/veh)		3.2	6.3	0.0		3.1	5.4		41.7	32.7		40.7
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.2	6.3	0.0		3.1	5.4		41.7	32.7		40.7
LOS		A	A	A		A	A		D	C		D
Approach Delay (s/veh)			5.5				5.3			35.9		
Approach LOS			A				A			D		
Queue Length 50th (ft)		11	60	0		2	35		19	28		32
Queue Length 95th (ft)		29	184	0		8	70		45	61		65
Internal Link Dist (ft)			300				274			253		
Turn Bay Length (ft)		300		300		100			100			100
Base Capacity (vph)		882	1380	1158		894	2334		260	532		385
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.13	0.35	0.02		0.02	0.20		0.14	0.12		0.16

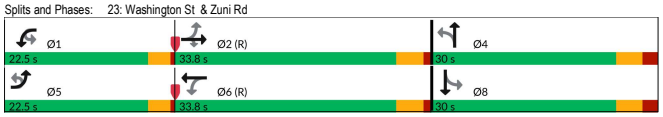
Intersection Summary	
Area Type:	Other
Cycle Length: 86.3	
Actuated Cycle Length: 86.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	34.8%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.4	
Actuated g/C Ratio	0.12	
v/c Ratio	0.59	
Control Delay (s/veh)	24.0	
Queue Delay	0.0	
Total Delay (s/veh)	24.0	
LOS	C	
Approach Delay (s/veh)	28.4	
Approach LOS	C	
Queue Length 50th (ft)	37	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	282	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

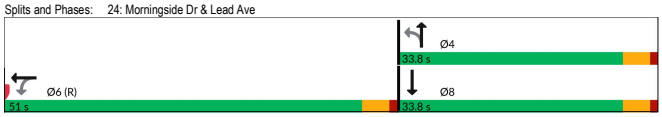


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	458	12	13	15	0	0	15	34
Future Volume (vph)	0	0	0	8	458	12	13	15	0	0	15	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.997						0.905	
Flt Protected					0.999			0.977				
Satd. Flow (prot)	0	0	0	0	1891	0	0	1856	0	0	1678	0
Flt Permitted					0.999			0.915				
Satd. Flow (perm)	0	0	0	0	1891	0	0	1738	0	0	1678	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	467	12	13	15	0	0	15	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	487	0	0	28	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.47			0.05			0.08	
Control Delay (s/veh)					13.5			18.9			9.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.5			18.9			9.6	
LOS					B			B			A	
Approach Delay (s/veh)					13.5			18.9			9.6	
Approach LOS					B			B			A	
Queue Length 50th (ft)					146			10			5	
Queue Length 95th (ft)					222			28			28	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1037			600			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.47			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	51	442	40	65	173	0	0	150	55
Future Volume (vph)	0	0	0	51	442	40	65	173	0	0	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											0.99	
Frt					0.990						0.964	
Flt Protected					0.995		0.950					
Satd. Flow (prot)	0	0	0	0	1872	0	1805	1900	0	0	1820	0
Flt Permitted					0.995		0.340					
Satd. Flow (perm)	0	0	0	0	1872	0	646	1900	0	0	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	52	451	41	66	177	0	0	153	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	544	0	66	177	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

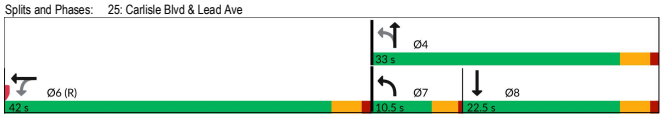
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.7		21.3	20.3			12.3	
Actuated g/C Ratio					0.61		0.28	0.27			0.16	
v/c Ratio					0.48		0.24	0.35			0.66	
Control Delay (s/veh)					11.3		10.3	16.3			35.6	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.3		10.3	16.3			35.6	
LOS					B		B	B			D	
Approach Delay (s/veh)					11.3			14.7			35.6	
Approach LOS					B			B			D	
Queue Length 50th (ft)					131		9	31			82	
Queue Length 95th (ft)					252		m17	41			137	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1144		291	722			454	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.48		0.23	0.25			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			

Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



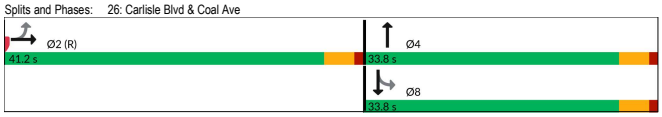
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Future Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.983						0.974				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	1855	0	0	0	0	0	1843	0	1805	1900	0
Flt Permitted		0.996								0.385		
Satd. Flow (perm)	0	1855	0	0	0	0	0	1843	0	732	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	45	486	76	0	0	0	0	196	47	26	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	607	0	0	0	0	0	243	0	26	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.2						13.8		13.8	13.8	
Actuated g/C Ratio		0.70						0.18		0.18	0.18	
v/c Ratio		0.47						0.69		0.19	0.52	
Control Delay (s/veh)		7.3						36.0		39.9	44.5	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		7.3						36.0		39.9	44.5	
LOS		A						D		D	D	
Approach Delay (s/veh)		7.3						36.0			44.0	
Approach LOS		A						D			D	
Queue Length 50th (ft)		102						98		13	89	
Queue Length 95th (ft)		216						155		m27	151	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1296						731		285	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.47						0.33		0.09	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 21.0		Intersection LOS: C	

Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Future Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.894				
Flt Protected		0.999									0.988	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1699	0	0	1877	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			737			657			532	
Travel Time (s)		31.0			16.8			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	595	8	0	0	0	0	17	63	5	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	80	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

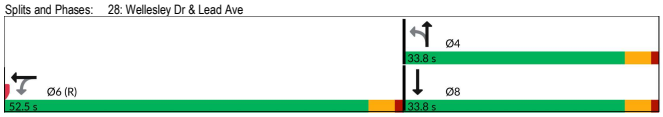
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	550	16	16	9	0	0	10	27
Future Volume (vph)	0	0	0	8	550	16	16	9	0	0	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.996						0.901	
Flt Protected					0.999			0.969				
Satd. Flow (prot)	0	0	0	0	1889	0	0	1841	0	0	1712	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	1889	0	0	1679	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	561	16	16	9	0	0	10	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	585	0	0	25	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.56			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					14.8			19.5			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					14.8			19.5			9.9	
LOS					B			B			A	
Approach Delay (s/veh)					14.8			19.5			9.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					189			9			4	
Queue Length 95th (ft)					283			26			24	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1051			570			599	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.56			0.04			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay (s/veh): 14.7 Intersection LOS: B
Intersection Capacity Utilization 52.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: Wellesley Dr & Lead Ave



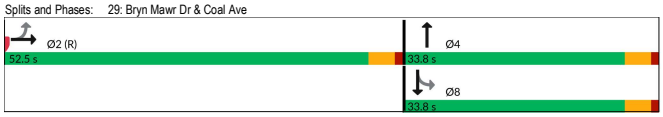
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Future Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.97			1.00	
Frt		0.999						0.884				
Flt Protected		0.999									0.982	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1624	0	0	1866	0
Flt Permitted		0.999									0.961	
Satd. Flow (perm)	0	1895	0	0	0	0	0	1624	0	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	610	3	0	0	0	0	1	6	3	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	628	0	0	0	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.60						0.01			0.01	
Control Delay (s/veh)		15.7						12.4			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		15.7						12.4			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		15.7						12.4			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		211						0			3	
Queue Length 95th (ft)		314						9			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						555			618	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.60						0.01			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.60
Intersection Signal Delay (s/veh): 15.7 Intersection LOS: B
Intersection Capacity Utilization 60.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



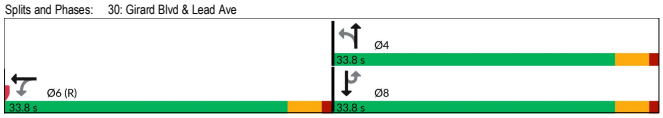
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	592	30	42	190	0	1	0	155
Future Volume (vph)	0	0	0	40	592	30	42	190	0	1	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt					0.994							0.952
Flt Protected					0.997			0.991				
Satd. Flow (prot)	0	0	0	0	1881	0	0	1883	0	0	0	1793
Flt Permitted					0.997			0.833				0.999
Satd. Flow (perm)	0	0	0	0	1881	0	0	1582	0	0	0	1791
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					5							52
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		25.8			33.6			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	604	31	43	194	0	1	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	676	0	0	237	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2		1	2		1		2
Detector Template				Left	Thru		Left	Thru		Left		Thru
Leading Detector (ft)				20	100		20	100		20		100
Trailing Detector (ft)				0	0		0	0		0		0
Detector 1 Position(ft)				0	0		0	0		0		0
Detector 1 Size(ft)				20	6		20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	88
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases				6			4			8		
Detector Phase				6	6		4	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0		8.0		8.0
Minimum Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (%)				50.0%	50.0%		50.0%	50.0%		50.0%		50.0%
Maximum Green (s)				29.3	29.3		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode				C-Max	C-Max		None	None		None		None
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					44.8			13.8				13.8
Actuated g/C Ratio					0.66			0.20				0.20
v/c Ratio					0.54			0.73				0.61
Control Delay (s/veh)					9.0			38.1				24.8
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					9.0			38.1				24.8
LOS					A			D				C
Approach Delay (s/veh)					9.0			38.1				24.8
Approach LOS					A			D				C
Queue Length 50th (ft)					122			93				73
Queue Length 95th (ft)					264			146				124
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)					1247			685				805
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.54			0.35				0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave



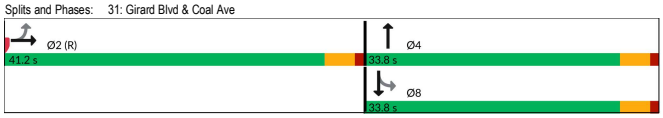
Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Future Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.990						0.978				
Flt Protected		0.994									0.990	
Satd. Flow (prot)	0	1866	0	0	0	0	0	1851	0	0	1881	0
Flt Permitted		0.994									0.823	
Satd. Flow (perm)	0	1865	0	0	0	0	0	1851	0	0	1563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	80	553	50	0	0	0	0	159	31	40	163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	190	0	0	203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.7						13.3			13.3	
Actuated g/C Ratio		0.70						0.18			0.18	
v/c Ratio		0.52						0.56			0.73	
Control Delay (s/veh)		20.5						31.4			44.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		20.5						31.4			44.2	
LOS		C						C			D	
Approach Delay (s/veh)		20.5						31.4			44.2	
Approach LOS		C						C			D	
Queue Length 50th (ft)		319						75			90	
Queue Length 95th (ft)		425						124			145	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1312						732			610	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.52						0.26			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 26.9		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



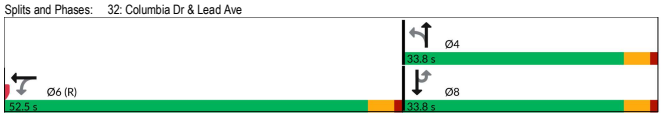
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	693	26	9	24	0	1	0	9
Future Volume (vph)	0	0	0	23	693	26	9	24	0	1	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00				0.98
Frt					0.995							0.909
Flt Protected					0.998			0.987				0.998
Satd. Flow (prot)	0	0	0	0	1887	0	0	1875	0	0	0	1696
Flt Permitted					0.998			0.955				0.997
Satd. Flow (perm)	0	0	0	0	1887	0	0	1812	0	0	0	1694
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					3							21
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		27.2			25.8			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	23	707	27	9	24	0	1	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	757	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8
Permitted Phases				6			4			8		
Minimum Split (s)				41.2	41.2		33.8	33.8		33.8		33.8
Total Split (s)				52.5	52.5		33.8	33.8		33.8		33.8
Total Split (%)				60.8%	60.8%		39.2%	39.2%		39.2%		39.2%
Maximum Green (s)				48.0	48.0		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					48.0			29.3				29.3
Actuated g/C Ratio					0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	21
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio					0.72			0.05				0.05
Control Delay (s/veh)					19.1			19.6				11.0
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					19.1			19.6				11.0
LOS					B			B				B
Approach Delay (s/veh)					19.1			19.6				11.0
Approach LOS					B			B				B
Queue Length 50th (ft)					282			12				4
Queue Length 95th (ft)					423			32				22
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)					1050			615				589
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.72			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 32: Columbia Dr & Lead Ave



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

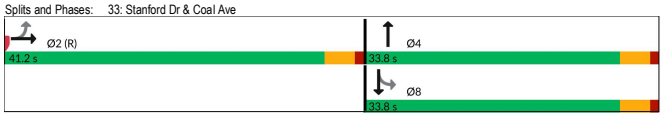
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Future Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			0.99	
Frt		0.999						0.973				
Flt Protected		0.999									0.967	
Satd. Flow (prot)	0	1859	0	0	0	0	0	1800	0	0	1801	0
Flt Permitted		0.999									0.908	
Satd. Flow (perm)	0	1859	0	0	0	0	0	1800	0	0	1681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	18	669	6	0	0	0	0	4	1	11	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	693	0	0	0	0	0	5	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	
v/c Ratio		0.76						0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		22.5						13.2			14.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.5						13.2			14.3	
LOS		C						B			B	
Approach Delay (s/veh)		22.5						13.2			14.3	
Approach LOS		C						B			B	
Queue Length 50th (ft)		248						1			4	
Queue Length 95th (ft)		386						7			16	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		910						703			656	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.76						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.2		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave

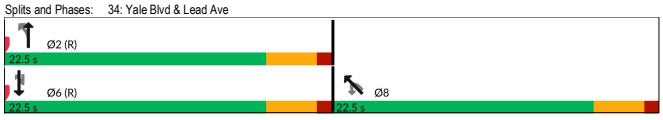


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	76	213	0	0	219	95	0	0	0	189	451	140
Future Volume (vph)	76	213	0	0	219	95	0	0	0	189	451	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.964	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1796	0
Flt Permitted	0.619									0.950		
Satd. Flow (perm)	1153	1863	0	0	1863	1583	0	0	0	1770	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						97					41	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		844			1282			105			163	
Travel Time (s)		23.0			29.1			2.4			3.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	78	217	0	0	223	97	0	0	0	193	460	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	217	0	0	223	97	0	0	0	193	603	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.17	0.29			0.30	0.14				0.27	0.81	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	4.3	4.5			10.6	3.2				10.4	23.0	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	4.3	4.5			10.6	3.2				10.4	23.0	
LOS	A	A			B	A				B	C	
Approach Delay (s/veh)		4.5			8.4						20.0	
Approach LOS		A			A						B	
Queue Length 50th (ft)	5	14			37	0				32	121	
Queue Length 95th (ft)	m8	m23			74	19				65	#279	
Internal Link Dist (ft)		764			1202				25		83	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	461	745			745	691				708	743	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.17	0.29			0.30	0.14				0.27	0.81	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 14.1		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 34: Yale Blvd & Lead Ave



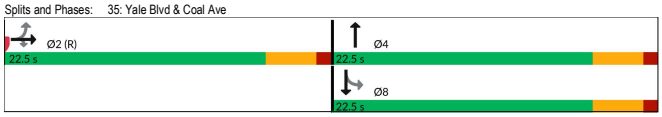
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	416	107	0	0	0	0	274	155	112	296	0
Future Volume (vph)	42	416	107	0	0	0	0	274	155	112	296	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97					0.99		1.00		
Frt			0.850					0.951				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1795	0	1805	1900	0
Flt Permitted	0.950									0.310		
Satd. Flow (perm)	1805	3610	1574	0	0	0	0	1795	0	587	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109					75				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			844	
Travel Time (s)		13.3			8.9			12.4			19.2	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	424	109	0	0	0	0	280	158	114	302	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	424	109	0	0	0	0	438	0	114	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	22.0	22.0	22.0					14.0		14.0	14.0	
Actuated g/C Ratio	0.49	0.49	0.49					0.31		0.31	0.31	
v/c Ratio	0.05	0.24	0.13					0.72		0.63	0.51	
Control Delay (s/veh)	7.9	8.1	2.9					17.8		30.4	16.8	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	7.9	8.1	2.9					17.8		30.4	16.8	
LOS	A	A	A					B		C	B	
Approach Delay (s/veh)		7.1						17.8			20.5	
Approach LOS		A						B			C	
Queue Length 50th (ft)	5	31	0					77		30	66	
Queue Length 95th (ft)	20	61	20					134		#63	138	
Internal Link Dist (ft)		507				310		465			764	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	881	1763	824					763		234	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.05	0.24	0.13					0.57		0.49	0.40	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 35: Yale Blvd & Coal Ave

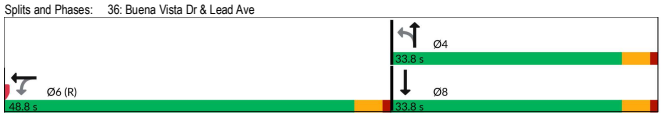


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	631	11	57	11	0	0	7	8
Future Volume (vph)	0	0	0	19	631	11	57	11	0	0	7	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.928	
Flt Protected					0.999			0.960				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1824	0	0	1748	0
Flt Permitted					0.999			0.801				
Satd. Flow (perm)	0	0	0	0	3595	0	0	1518	0	0	1748	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	19	644	11	58	11	0	0	7	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	674	0	0	69	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.35			0.13			0.02	
Control Delay (s/veh)					11.5			18.9			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.5			18.9			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					11.5			18.9			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					97			24			2	
Queue Length 95th (ft)					133			52			14	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1929			538			625	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.35			0.13			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

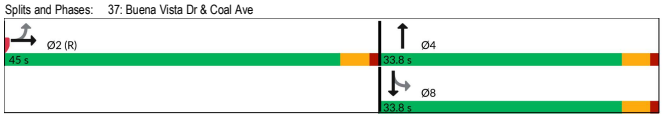


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	542	47	0	0	0	0	40	30	8	23	0
Future Volume (vph)	29	542	47	0	0	0	0	40	30	8	23	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.99			1.00	
Frt		0.989						0.942				
Flt Protected		0.998									0.987	
Satd. Flow (prot)	0	3548	0	0	0	0	0	1773	0	0	1875	0
Flt Permitted		0.998									0.897	
Satd. Flow (perm)	0	3542	0	0	0	0	0	1773	0	0	1698	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16						31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	553	48	0	0	0	0	41	31	8	23	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	631	0	0	0	0	0	72	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.9						8.3			8.3	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.22						0.34			0.17	
Control Delay (s/veh)		2.2						25.7			34.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.2						25.7			34.3	
LOS		A						C			C	
Approach Delay (s/veh)		2.2						25.7			34.3	
Approach LOS		A						C			C	
Queue Length 50th (ft)		30						19			14	
Queue Length 95th (ft)		47						56			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2919						678			631	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.22						0.11			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	530	97	59	278	0	2	0	340
Future Volume (vph)	0	0	0	83	530	97	59	278	0	2	0	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0		0	
Storage Lanes	0		0	0		1	1		0		0	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	0.91	1.00	0.91
Ped Bike Factor					1.00	0.98	1.00					1.00
Frt						0.850						0.979
Flt Protected					0.993		0.950					
Satd. Flow (prot)	0	0	0	0	3585	1615	1805	5187	0	0	0	5066
Flt Permitted					0.993		0.440					0.939
Satd. Flow (perm)	0	0	0	0	3582	1586	834	5187	0	0	0	4757
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)						99						38
Link Speed (mph)		30			30			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		48.6			22.7			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	85	541	99	60	284	0	2	0	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	626	99	60	284	0	0	0	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2	1	1	2		1		2
Detector Template				Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)				20	100	20	20	100		20		100
Trailing Detector (ft)				0	0	0	0	0		0		0
Detector 1 Position(ft)				0	0	0	0	0		0		0
Detector 1 Size(ft)				20	6	20	20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA	Perm	pm+pt	NA		Perm		NA
Protected Phases					6		7	4				8
Permitted Phases				6		6	4			8		
Detector Phase				6	6	6	7	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0		8.0		8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%		30.0%		30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0		18.0		18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5		3.5		3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				0.0
Total Lost Time (s)					5.5	5.5	4.0	4.5				4.5
Lead/Lag							Lead			Lag		Lag
Lead-Lag Optimize?							Yes			Yes		Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0		3.0		3.0
Recall Mode				C-Max	C-Max	C-Max	None	Max		Max		Max
Walk Time (s)				7.0	7.0	7.0		7.0		7.0		7.0
Flash Don't Walk (s)				23.0	23.0	23.0		10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0	0		0		0		0
Act Effct Green (s)					32.0	32.0	33.5	33.0				26.9
Actuated g/C Ratio					0.43	0.43	0.45	0.44				0.36
v/c Ratio					0.41	0.14	0.14	0.12				0.23
Control Delay (s/veh)					16.0	3.6	12.7	12.6				16.8
Queue Delay					0.0	0.0	0.0	0.0				0.0
Total Delay (s/veh)					16.0	3.6	12.7	12.6				16.8
LOS					B	A	B	B				B
Approach Delay (s/veh)					14.3			12.7				16.8
Approach LOS					B			B				B
Queue Length 50th (ft)					102	0	15	27				46
Queue Length 95th (ft)					143	25	35	42				71
Internal Link Dist (ft)		2058			918			690				1038
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1528	733	514	2282				1729
Starvation Cap Reductn					0	0	0	0				0
Spillback Cap Reductn					0	0	0	0				0
Storage Cap Reductn					0	0	0	0				0
Reduced v/c Ratio					0.41	0.14	0.12	0.12				0.23

Intersection Summary

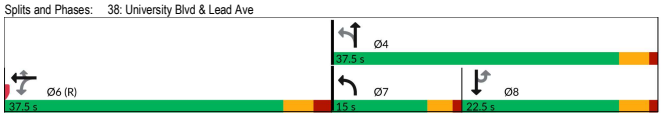
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.41

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 14.6	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



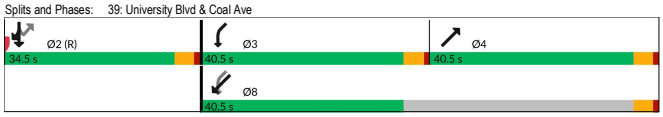
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	411	77	0	285	104	94	316	0
Future Volume (vph)	0	0	0	25	411	77	0	285	104	94	316	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				0.99					0.97			
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.497		
Satd. Flow (perm)	0	0	0	1794	3610	1615	0	5187	1562	944	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79			106			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	26	419	79	0	291	106	96	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	419	79	0	291	106	96	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.06	0.45	0.17		0.18	0.07	0.11	0.09	
Control Delay (s/veh)				32.7	37.6	8.2		29.4	0.1	7.3	7.1	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.7	37.6	8.2		29.4	0.1	7.3	7.1	
LOS				C	D	A		C	A	A	A	
Approach Delay (s/veh)					32.9			21.5			7.1	
Approach LOS					C			C			A	
Queue Length 50th (ft)				15	137	0		57	0	23	28	
Queue Length 95th (ft)				38	186	38		81	0	42	40	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				465	937	477		1616	1562	893	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.06	0.45	0.17		0.18	0.07	0.11	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	

Intersection Signal Delay (s/veh): 21.5	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

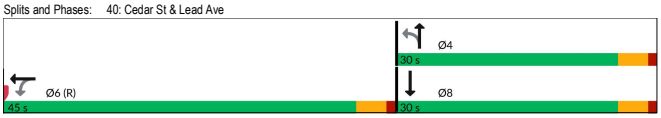


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	657	20	16	38	0	0	17	81
Future Volume (vph)	0	0	0	29	657	20	16	38	0	0	17	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.996						0.888	
Flt Protected					0.998			0.986				
Satd. Flow (prot)	0	0	0	0	3586	0	0	1873	0	0	1687	0
Flt Permitted					0.998			0.866				
Satd. Flow (perm)	0	0	0	0	3586	0	0	1645	0	0	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						83	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	30	670	20	16	39	0	0	17	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	720	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					61.1			8.3			8.3	
Actuated g/C Ratio					0.81			0.11			0.11	
v/c Ratio					0.25			0.30			0.38	
Control Delay (s/veh)					2.0			35.3			15.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					2.0			35.3			15.0	
LOS					A			D			B	
Approach Delay (s/veh)					2.0			35.3			15.0	
Approach LOS					A			D			B	
Queue Length 50th (ft)					29			24			7	
Queue Length 95th (ft)					45			56			49	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2922			559			628	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.25			0.10			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 40.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

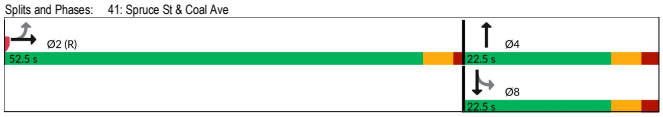


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	519	7	0	0	0	0	7	7	8	10	0
Future Volume (vph)	16	519	7	0	0	0	0	7	7	8	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.998						0.932				
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1748	0	0	1858	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	3597	0	0	0	0	0	1748	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	530	7	0	0	0	0	7	7	8	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	553	0	0	0	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.16						0.07			0.09	
Control Delay (s/veh)		0.9						24.0			31.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						24.0			31.4	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						24.0			31.4	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						3			8	
Queue Length 95th (ft)		40						19			26	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3424						401			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.16						0.03			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.16			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



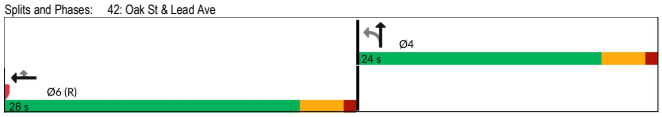
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	299	454	71	482	0	0	0	0
Future Volume (vph)	0	0	0	0	299	454	71	482	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	3610	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	3610	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						196	72					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	305	463	72	492	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	305	463	72	492	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					31.1	31.1	11.9	11.9				
Actuated g/C Ratio					0.60	0.60	0.23	0.23				
v/c Ratio					0.14	0.45	0.15	0.59				
Control Delay (s/veh)					5.5	5.5	5.2	20.4				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					5.5	5.5	5.2	20.4				
LOS					A	A	A	C				
Approach Delay (s/veh)					5.5			18.5				
Approach LOS					A			B				
Queue Length 50th (ft)					17	32	0	71				
Queue Length 95th (ft)					40	101	21	96				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2156	1026	721	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.14	0.45	0.10	0.36				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	583	0	0	0	0	0	231	62	0	0	0
Future Volume (vph)	315	583	0	0	0	0	0	231	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								1.00				
Frt								0.968				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	5007	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	5007	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	321							63				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	321	595	0	0	0	0	0	236	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	595	0	0	0	0	0	299	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.28	0.30						0.26				
Control Delay (s/veh)	1.5	5.8						12.0				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	1.5	5.8						12.0				
LOS	A	A						B				
Approach Delay (s/veh)		4.3						12.0				
Approach LOS		A						B				
Queue Length 50th (ft)	0	36						18				
Queue Length 95th (ft)	23	57						35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)	100											
Base Capacity (vph)	1145	2005						1930				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.28	0.30						0.15				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.30	

Intersection Signal Delay (s/veh): 6.2	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

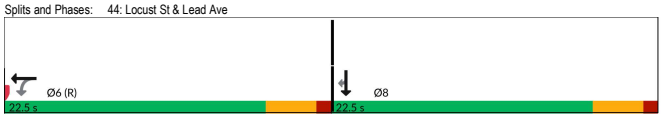
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	90	341	0	0	0	0	0	308	434
Future Volume (vph)	0	0	0	90	341	0	0	0	0	0	308	434
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.940	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3251	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3251	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				92							208	235
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	92	348	0	0	0	0	0	314	443
Shared Lane Traffic (%)												47%
Lane Group Flow (vph)	0	0	0	92	348	0	0	0	0	0	522	235
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				23.1	23.1						12.9	12.9
Actuated g/C Ratio				0.51	0.51						0.29	0.29
v/c Ratio				0.09	0.19						0.48	0.40
Control Delay (s/veh)				2.8	7.1						8.7	4.1
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.8	7.1						8.7	4.1
LOS				A	A						A	A
Approach Delay (s/veh)					6.2						7.3	
Approach LOS					A						A	
Queue Length 50th (ft)				0	21						36	0
Queue Length 95th (ft)				18	51						54	32
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				300								
Base Capacity (vph)				971	1853						1425	729
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.19						0.37	0.32

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay (s/veh): 6.9	Intersection LOS: A

Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



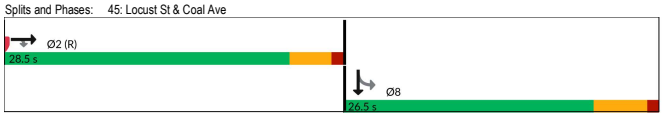
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	583	66	0	0	0	0	0	0	315	89	0
Future Volume (vph)	0	583	66	0	0	0	0	0	0	315	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.99									
Frt			0.850									
Flt Protected										0.950	0.969	
Satd. Flow (prot)	0	3610	1615	0	0	0	0	0	0	1643	3351	0
Flt Permitted										0.950	0.969	
Satd. Flow (perm)	0	3610	1593	0	0	0	0	0	0	1643	3351	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			67							160	161	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	595	67	0	0	0	0	0	0	321	91	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	595	67	0	0	0	0	0	0	160	252	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		35.0	35.0							10.0	10.0	
Actuated g/C Ratio		0.64	0.64							0.18	0.18	
v/c Ratio		0.26	0.06							0.37	0.34	
Control Delay (s/veh)		4.7	1.4							7.0	9.4	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		4.7	1.4							7.0	9.4	
LOS		A	A							A	A	
Approach Delay (s/veh)		4.4									8.5	
Approach LOS		A									A	
Queue Length 50th (ft)		36	0							0	13	
Queue Length 95th (ft)		55	10							43	41	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		2296	1037							726	1379	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.26	0.06							0.22	0.18	

Intersection Summary
Area Type: Other
Cycle Length: 55
Actuated Cycle Length: 55
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

Intersection Signal Delay (s/veh): 6.0 Intersection LOS: A
Intersection Capacity Utilization 34.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 45: Locust St & Coal Ave

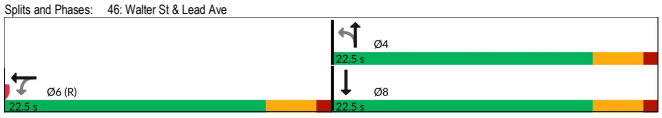


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Future Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.994						0.932	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	3580	0	0	1866	0	0	1757	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3580	0	0	1900	0	0	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12						5	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	650	30	4	7	0	0	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	696	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.21			0.03			0.03	
Control Delay (s/veh)					1.3			22.8			12.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.3			22.8			12.8	
LOS					A			C			B	
Approach Delay (s/veh)					1.3			22.8			12.8	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			3			1	
Queue Length 95th (ft)					56			15			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3310			760			705	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.21			0.01			0.01	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 22.5 (50%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.21
Intersection Signal Delay (s/veh): 1.8 Intersection LOS: A
Intersection Capacity Utilization 37.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 46: Walter St & Lead Ave

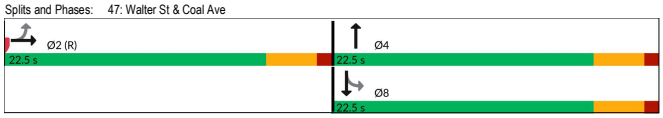


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Future Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.900				
Flt Protected											0.983	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1693	0	0	1868	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1693	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						23				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		838			715			226			362	
Travel Time (s)		19.0			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	608	3	0	0	0	0	8	23	7	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.18						0.10			0.06	
Control Delay (s/veh)		1.4						10.1			19.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						10.1			19.0	
LOS		A						B			B	
Approach Delay (s/veh)		1.4						10.1			19.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			5	
Queue Length 95th (ft)		47						18			21	
Internal Link Dist (ft)		758			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						691			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.18						0.04			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 34.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Future Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						0.99		1.00				
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1754	3574	0	0	3574
Flt Permitted				0.950				0.482				
Satd. Flow (perm)	0	0	0	1805	3610	1593	0	887	3574	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						94						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	0	0	0	77	463	96	2	67	371	0	0	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	77	463	96	0	69	371	0	0	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1589
Right Turn on Red	Yes
Satd. Flow (RTOR)	79
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	79
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	24.2	24.2	47.3			47.3
Total Split (s)				38.5	38.5	38.5	31.9	31.9	47.3			47.3
Total Split (%)				32.7%	32.7%	32.7%	27.1%	27.1%	40.2%			40.2%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	42.8			42.8
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		46.9	42.8			42.8
Actuated g/C Ratio				0.50	0.50	0.50		0.40	0.36			0.36
v/c Ratio				0.09	0.26	0.11		0.18	0.29			0.28
Control Delay (s/veh)				16.8	18.0	3.8		21.9	27.4			27.2
Queue Delay				0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)				16.8	18.0	3.8		21.9	27.4			27.2
LOS				B	B	A		C	C			C
Approach Delay (s/veh)					15.7				26.5			23.4
Approach LOS					B				C			C
Queue Length 50th (ft)				31	106	1		30	104			101
Queue Length 95th (ft)				59	143	29		59	143			140
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				896	1793	838		730	1299			1299
Starvation Cap Reductn				0	0	0		0	0			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.09	0.26	0.11		0.09	0.29			0.28

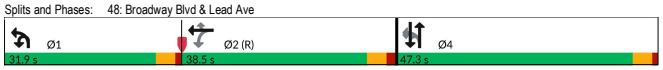
Intersection Summary	
Area Type:	Other
Cycle Length: 117.7	
Actuated Cycle Length: 117.7	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	42.8
Actuated g/C Ratio	0.36
v/c Ratio	0.13
Control Delay (s/veh)	6.0
Queue Delay	0.0
Total Delay (s/veh)	6.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	32
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	628
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 21.1	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



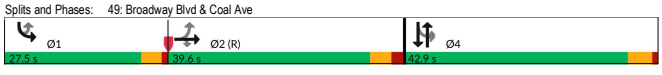
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Future Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.99		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3574	1615	0	1805	3610
Flt Permitted	0.950										0.459	
Satd. Flow (perm)	1798	3610	1589	0	0	0	0	3574	1594	0	871	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			66						69			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			267			421				359
Travel Time (s)		10.8			6.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	36	489	66	0	0	0	0	394	52	4	64	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	66	0	0	0	0	394	52	0	68	362
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9		61.4	37.9
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34		0.56	0.34
v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29
Control Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		10.3	27.1
LOS	C	C	A					C	A		B	C
Approach Delay (s/veh)		28.8						24.7				24.4
Approach LOS		C						C				C
Queue Length 50th (ft)	18	144	0					106	0		19	97
Queue Length 95th (ft)	42	194	31					147	18		37	136
Internal Link Dist (ft)		395			187			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	557	1119	538					1231	594		681	1243
Starvation Cap Reductn	0	0	0					0	0		0	0
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29

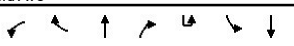
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 26.3		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave



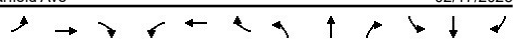
Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	



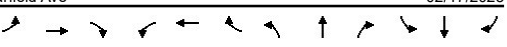
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	61	361
Future Volume (vph)	42	26	420	18	1	61	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.993
Satd. Flow (prot)	1713	0	1853	0	0	0	1850
Flt Permitted	0.970						0.993
Satd. Flow (perm)	1713	0	1853	0	0	0	1850
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	62	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	431
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.2%	ICU Level of Service B	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.970			0.997			0.987	
Flt Protected		0.993			0.989			0.997			0.999	
Satd. Flow (prot)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.993			0.989			0.997			0.999	
Satd. Flow (perm)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	65	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	29.1%	ICU Level of Service A	
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.899			0.999			0.994	
Flt Protected		0.997			0.988		0.950			0.950		
Satd. Flow (prot)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.997			0.988		0.950			0.950		
Satd. Flow (perm)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	64	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.6%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	58	9	5	7	6	1
Future Volume (vph)	58	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.982				0.981	
Flt Protected	0.958			0.980		
Satd. Flow (prot)	1787	0	0	1862	1864	0
Flt Permitted	0.958			0.980		
Satd. Flow (perm)	1787	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	59	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.2%		ICU Level of Service A	
Analysis Period (min) 15			

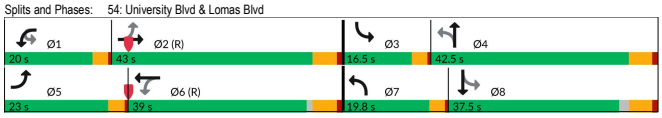
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99		0.98	1.00	1.00
Frt		0.981				0.968				0.850		0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11		11	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2			1	6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 122			
Actuated Cycle Length: 122			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

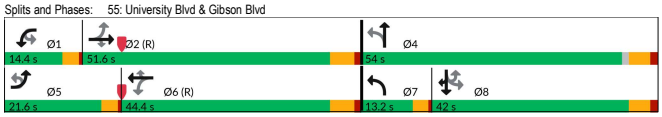
Intersection Summary	
Area Type:	Other
Cycle Length: 121.2	
Actuated Cycle Length: 121.2	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	489	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	489	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.994				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3584	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3584	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	499	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	519	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.40			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	29.2			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	29.2			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				31.3				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	153			30	161	
Queue Length 95th (ft)		#354	350	13		60	202			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1300			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.40			0.17	0.57	

Intersection Summary	
Area Type:	Other
Cycle Length: 118.2	
Actuated Cycle Length: 118.2	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.52	

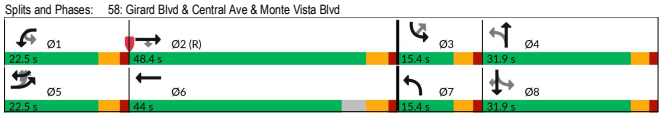
Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 91.5	Intersection LOS: F
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	867	0	0	0
Future Volume (vph)	0	0	867	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	885	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	885	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 147
Actuated Cycle Length: 147
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07

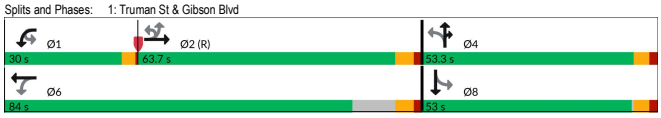
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary

Intersection Signal Delay (s/veh): 30.5 Intersection LOS: C
Intersection Capacity Utilization 71.2% ICU Level of Service C
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

Intersection Summary	
Area Type:	Other
Cycle Length: 133.8	
Actuated Cycle Length: 133.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

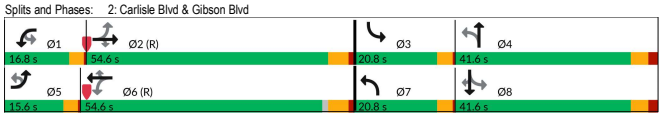
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



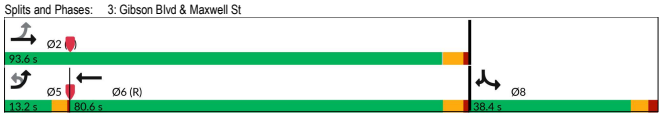
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 132.2	
Actuated Cycle Length: 132.2	
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	

Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

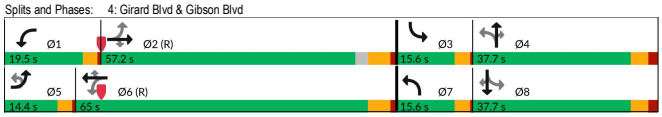
Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor						0.99		0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

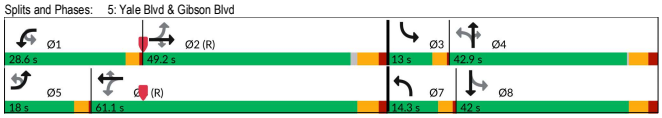
Intersection Summary
Area Type: Other
Cycle Length: 135.4
Actuated Cycle Length: 135.4
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 21.0 Intersection LOS: C

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization 76.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

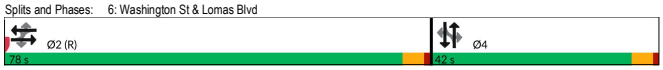
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.1	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

Intersection Summary

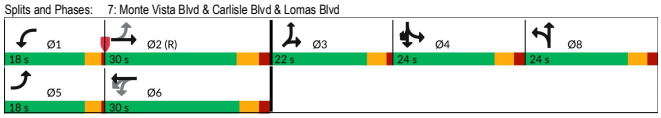
Area Type: Other
Cycle Length: 118
Actuated Cycle Length: 118
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay (s/veh): 84.6 Intersection LOS: F
Intersection Capacity Utilization 100.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



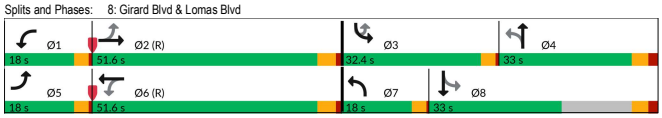
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 30.3 Intersection LOS: C
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

Intersection Summary

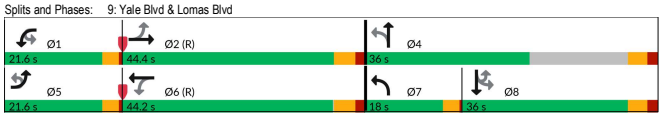
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

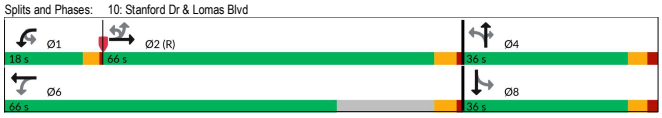
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	157	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	157	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.268				0.199			0.316			0.381
Satd. Flow (perm)	0	494	1881	0	0	378	1883	0	598	1869	0	718
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			701		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	164	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	164	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		16.5	61.8			20.1	68.0		30.0	30.0		30.0
Actuated g/C Ratio		0.13	0.49			0.16	0.54		0.24	0.24		0.24
v/c Ratio		0.67	0.44			0.90	0.43		1.16	0.57		0.05
Control Delay (s/veh)		95.8	25.5			144.1	23.4		167.0	45.5		32.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	25.5			144.1	23.4		167.0	45.5		32.3
LOS		F	C			F	C		F	D		C
Approach Delay (s/veh)			32.3				36.6			92.9		
Approach LOS			C				D			F		
Queue Length 50th (ft)		33	218			43	228		~157	183		6
Queue Length 95th (ft)		#93	347			#134	387		#250	234		18
Internal Link Dist (ft)			1288				848			621		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		69	919			61	1014		220	691		264
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.62	0.44			0.89	0.43		0.75	0.37		0.03

Intersection Summary

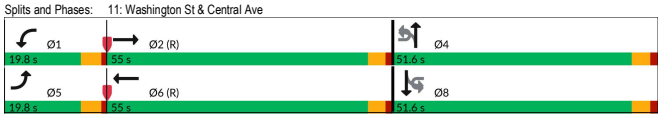
Area Type: Other
Cycle Length: 126.4
Actuated Cycle Length: 126.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay (s/veh): 51.7 Intersection LOS: D
Intersection Capacity Utilization 67.4% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	30.0	
Actuated g/C Ratio	0.24	
v/c Ratio	0.66	
Control Delay (s/veh)	48.3	
Queue Delay	0.0	
Total Delay (s/veh)	48.3	
LOS	D	
Approach Delay (s/veh)	47.8	
Approach LOS	D	
Queue Length 50th (ft)	212	
Queue Length 95th (ft)	269	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



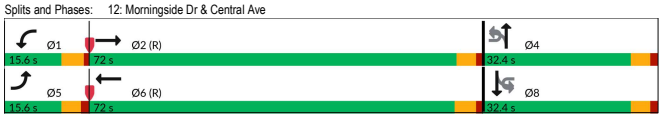
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	568	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	568	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	951	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	592	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	599	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.41			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	8.5			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	8.5			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.6			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	176			25		
Queue Length 95th (ft)		51	203			48	326			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.41			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 14.7		Intersection LOS: B	
Intersection Capacity Utilization 51.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	506	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	506	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	280	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	527	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	527	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.74	0.08	0.14	0.78		0.32
Control Delay (s/veh)		438.7	29.9	1.9		176.2	40.4	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		438.7	29.9	1.9		176.2	40.4	0.2	28.4	60.0		32.6
LOS		F	C	A		F	D	A	C	E		C
Approach Delay (s/veh)			106.7				50.7			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~130	221	0		50	353	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	490	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.74	0.08	0.13	0.57		0.31

Intersection Summary

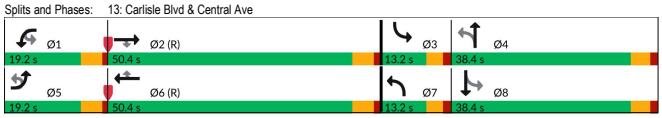
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.78
Intersection Signal Delay (s/veh): 67.4 Intersection LOS: E
Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	543	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	543	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			1.00	1.00			0.94		
Frt			0.990				0.996			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1891	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	977	1872	0	0	1026	1891	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	566	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	581	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

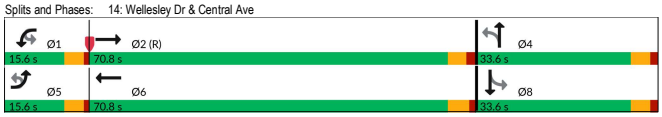
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.3			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.39			0.35		
Control Delay (s/veh)		64.6	4.3			58.7	7.4			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.6	4.3			58.7	7.4			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.5			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	153			19		
Queue Length 95th (ft)		50	98			46	289			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		99	1471			103	1485			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.39			0.12		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.2	Intersection LOS: B
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	540	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	540	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.998			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1895	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	970	1880	0	0	1051	1895	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	563	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	572	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.39			0.39		
Control Delay (s/veh)		60.2	7.3			69.5	4.0			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.2	7.3			69.5	4.0			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				6.6			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	72			32		
Queue Length 95th (ft)		49	259			51	93			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		97	1469			102	1472			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.39			0.15		

Intersection Summary

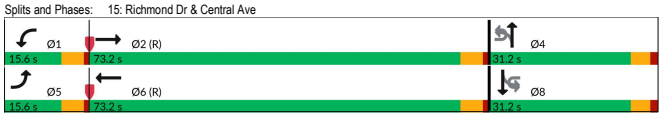
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary

Intersection Signal Delay (s/veh): 12.5 Intersection LOS: B
Intersection Capacity Utilization 52.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	647	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	647	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.97	1.00			0.98		
Frt			0.993				0.990			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3559	0	0	1731	0	0
Flt Permitted		0.563				0.500				0.873		
Satd. Flow (perm)	0	1044	3574	0	0	925	3559	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				10			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	674	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	720	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.30	0.25			0.38	0.30			0.27		
Control Delay (s/veh)		36.8	8.9			38.7	8.6			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		36.8	8.9			38.7	8.6			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	85			14		
Queue Length 95th (ft)		43	137			51	161			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		146	2391			138	2421			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.26	0.25			0.34	0.30			0.10		

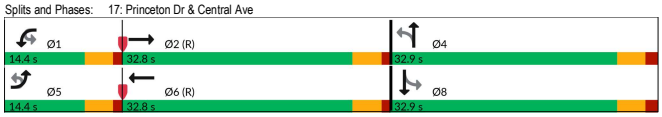
Intersection Summary	
Area Type:	Other
Cycle Length: 80.1	
Actuated Cycle Length: 80.1	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary	

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	667	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	667	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				2			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	695	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	708	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.25			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.6			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.6			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	38			2		8	1
Queue Length 95th (ft)	36	103			30	112			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.25			0.04		0.03	0.06

Intersection Summary

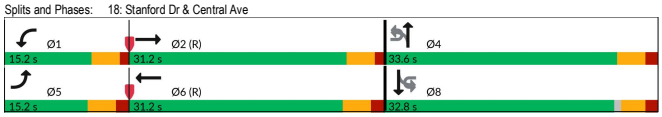
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.25

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 6.7	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



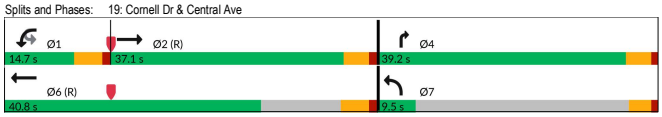
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	675	22	22
Future Volume (vph)	587	58	1	33	675	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	703	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	703	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.21	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.2	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	48	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	509	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.25	0.03	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 91	
Actuated Cycle Length: 91	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.31	

Intersection Signal Delay (s/veh): 4.8	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	226	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	226	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1274			105
Travel Time (s)		32.1				17.0			34.7			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	235	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	238	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			4.49	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			Error	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			Error	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				525.0			33.3			44.8
Approach LOS		D				F			C			D
Queue Length 50th (ft)	16	222			~359	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#550	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1194			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			4.49	0.19		0.37	0.05	0.20	0.09	0.15

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 4.49

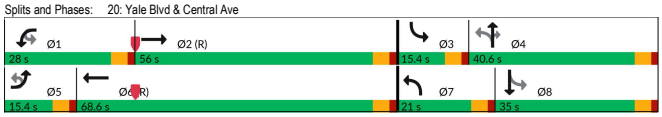
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 251.9	Intersection LOS: F
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	495	21	10	47	555	148	46	338	54	171
Future Volume (vph)	3	53	495	21	10	47	555	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.98		0.97	0.99		0.99
Frt			0.994				0.968			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	3421	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1883	0	0	152	3421	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				23			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	516	22	10	49	578	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	538	0	0	59	732	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.3			47.0	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.39			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.74			1.44	0.49		0.27	0.72		0.67
Control Delay (s/veh)		295.9	52.9			333.5	35.7		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	52.9			333.5	35.7		51.1	78.7		64.4
LOS		F	D			F	D		D	E		E
Approach Delay (s/veh)			76.5				57.9			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	515			~90	294		42	159		168
Queue Length 95th (ft)		#197	678			#206	386		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	726			41	1494		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.74			1.44	0.49		0.18	0.39		0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 172	
Actuated Cycle Length: 172	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	

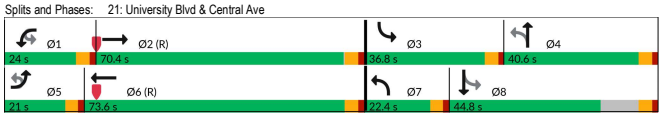
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary

Intersection Signal Delay (s/veh): 67.2	Intersection LOS: E
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	501	63	6	29	657	0	125	0	64	0
Future Volume (vph)	4	0	501	63	6	29	657	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94					0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.346				0.406			0.950			
Satd. Flow (perm)	0	657	1900	1513	0	771	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							666	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	522	66	6	30	684	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	522	66	0	36	684	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.38	0.06		0.06	0.47		0.53		0.04	
Control Delay (s/veh)		3.3	7.8	1.7		3.3	7.0		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.8	1.7		3.3	7.0		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			7.1				6.8			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	152	0		5	145		98		0	
Queue Length 95th (ft)		3	238	14		13	337		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		677	1389	1124		728	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.38	0.06		0.05	0.47		0.21		0.04	

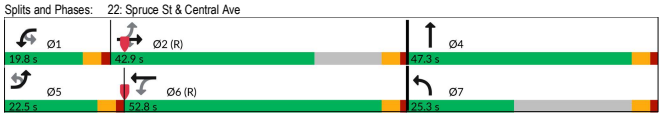
Intersection Summary
Area Type: Other
Cycle Length: 122.6
Actuated Cycle Length: 122.6
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.0 Intersection LOS: B
Intersection Capacity Utilization 57.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	572	208	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	572	208	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97		0.99		1.00	0.99		1.00	0.99
Frt				0.850		0.960			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1804	1900	1615	1805	3439	0	1805	1830	0	1805	1730
Flt Permitted		0.290			0.414			0.455			0.704	
Satd. Flow (perm)	0	550	1900	1566	787	3439	0	863	1830	0	1336	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		65			15			68
Link Speed (mph)			30			30			30			30
Link Distance (ft)			388			341			419			295
Travel Time (s)			8.8			7.8			9.5			6.7
Confl. Peds. (#/hr)		3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	596	217	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	22.0	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	25.5%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	18.5	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		65.0	62.4	62.4	58.9	53.7		12.3	12.3		12.3	12.3
Actuated g/C Ratio		0.75	0.72	0.72	0.68	0.62		0.14	0.14		0.14	0.14
v/c Ratio		0.32	0.44	0.02	0.02	0.38		0.34	0.30		0.34	0.64
Control Delay (s/veh)		5.1	7.3	0.0	4.0	8.7		39.5	29.0		36.9	31.7
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	7.3	0.0	4.0	8.7		39.5	29.0		36.9	31.7
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			6.7			8.6			32.6			33.0
Approach LOS			A			A			C			C
Queue Length 50th (ft)		19	97	0	1	91		21	33		33	65
Queue Length 95th (ft)		46	271	0	7	164		49	68		66	124
Internal Link Dist (ft)			308			261			339			215
Turn Bay Length (ft)		300		300	100			100			100	
Base Capacity (vph)		690	1373	1153	810	2165		245	530		379	539
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.24	0.44	0.02	0.02	0.38		0.17	0.15		0.17	0.36

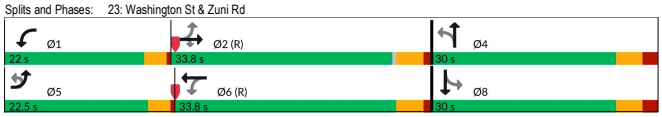
Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 12.5 Intersection LOS: B
Intersection Capacity Utilization 67.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 23: Washington St & Zuni Rd

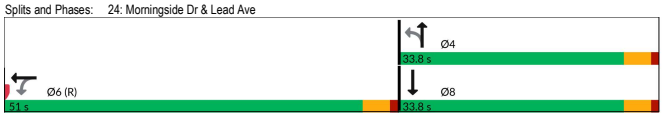


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	714	13	11	10	0	0	17	60
Future Volume (vph)	0	0	0	11	714	13	11	10	0	0	17	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.98	
Frt					0.998						0.895	
Flt Protected					0.999			0.974				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1851	0	0	1664	0
Flt Permitted					0.999			0.904				
Satd. Flow (perm)	0	0	0	0	1893	0	0	1718	0	0	1664	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.2			4.0			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	11	744	14	11	10	0	0	18	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	769	0	0	21	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.74			0.04			0.13	
Control Delay (s/veh)					20.0			18.8			7.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.0			18.8			7.9	
LOS					C			B			A	
Approach Delay (s/veh)					20.0			18.8			7.9	
Approach LOS					C			B			A	
Queue Length 50th (ft)					290			7			6	
Queue Length 95th (ft)					435			23			35	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1038			593			616	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.74			0.04			0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	682	44	156	278	0	0	185	53
Future Volume (vph)	0	0	0	57	682	44	156	278	0	0	185	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						1.00	
Frt					0.992						0.970	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	1875	0	1805	1900	0	0	1834	0
Flt Permitted					0.996		0.291					
Satd. Flow (perm)	0	0	0	0	1875	0	553	1900	0	0	1834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	59	710	46	163	290	0	0	193	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	815	0	163	290	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					42.2		24.8	23.8			13.5	
Actuated g/C Ratio					0.56		0.33	0.32			0.18	
v/c Ratio					0.77		0.55	0.48			0.72	
Control Delay (s/veh)					20.6		26.3	24.4			38.4	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					20.6		26.3	24.4			38.4	
LOS					C		C	C			D	
Approach Delay (s/veh)					20.6			25.1			38.4	
Approach LOS					C			C			D	
Queue Length 50th (ft)					271		41	81			101	
Queue Length 95th (ft)					#549		m69	m116			163	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					1058		299	722			453	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.77		0.55	0.40			0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			

Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Future Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.978						0.976				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	1842	0	0	0	0	0	1847	0	1805	1900	0
Flt Permitted		0.995								0.204		
Satd. Flow (perm)	0	1841	0	0	0	0	0	1847	0	388	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	79	611	132	0	0	0	0	372	81	23	228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	822	0	0	0	0	0	453	0	23	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

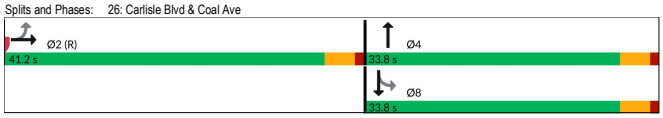
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		43.7						22.3		22.3	22.3	
Actuated g/C Ratio		0.58						0.30		0.30	0.30	
v/c Ratio		0.76						0.81		0.20	0.40	
Control Delay (s/veh)		19.7						34.5		37.8	38.5	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		19.7						34.5		37.8	38.5	
LOS		B						C		D	D	
Approach Delay (s/veh)		19.7						34.5			38.4	
Approach LOS		B						C			D	
Queue Length 50th (ft)		257						185		11	114	
Queue Length 95th (ft)		#570						253		m16	m148	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1079						731		151	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.76						0.62		0.15	0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 27.2	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Future Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.874				
Flt Protected		0.999									0.974	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Flt Permitted		0.999									0.974	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1661	0	0	1851	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			676			657			532	
Travel Time (s)		31.0			15.4			14.9			12.1	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	693	8	0	0	0	0	7	95	11	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	715	0	0	0	0	0	102	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

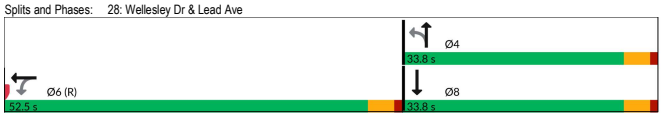
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.7%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	735	11	13	17	0	0	7	27
Future Volume (vph)	0	0	0	10	735	11	13	17	0	0	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.998						0.892	
Flt Protected					0.999			0.979				
Satd. Flow (prot)	0	0	0	0	1894	0	0	1860	0	0	1657	0
Flt Permitted					0.999			0.920				
Satd. Flow (perm)	0	0	0	0	1894	0	0	1744	0	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	10	766	11	14	18	0	0	7	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	787	0	0	32	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.75			0.05			0.06	
Control Delay (s/veh)					20.1			19.6			9.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					20.1			19.6			9.4	
LOS					C			B			A	
Approach Delay (s/veh)					20.1			19.6			9.4	
Approach LOS					C			B			A	
Queue Length 50th (ft)					302			12			3	
Queue Length 95th (ft)					453			31			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1053			592			581	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.75			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 19.6		Intersection LOS: B	
Intersection Capacity Utilization	61.6%	ICU Level of Service B	
Analysis Period (min)	15		

Splits and Phases: 28: Wellesley Dr & Lead Ave

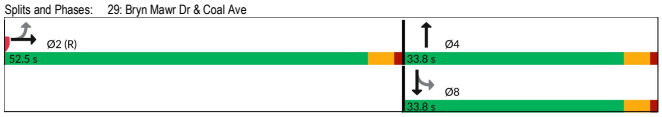


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Future Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00									1.00	
Frt		0.998										
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	1894	0	0	0	0	0	1900	0	0	1858	0
Flt Permitted		0.999									0.947	
Satd. Flow (perm)	0	1894	0	0	0	0	0	1900	0	0	1791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	817	10	0	0	0	0	5	0	5	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	838	0	0	0	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.80						0.01			0.02	
Control Delay (s/veh)		22.4						19.0			19.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		22.4						19.0			19.2	
LOS		C						B			B	
Approach Delay (s/veh)		22.4						19.0			19.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		337						2			4	
Queue Length 95th (ft)		508						9			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1053						645			608	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.80						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



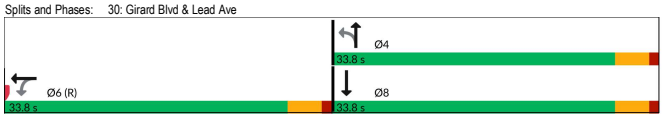
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	783	41	48	208	0	0	175	76
Future Volume (vph)	0	0	0	41	783	41	48	208	0	0	175	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.994						0.959	
Flt Protected					0.998			0.991				
Satd. Flow (prot)	0	0	0	0	1883	0	0	1883	0	0	1809	0
Flt Permitted					0.998			0.755				
Satd. Flow (perm)	0	0	0	0	1883	0	0	1434	0	0	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)	1			1			1		1	1		1
Confl. Bikes (#/hr)				2		5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	43	816	43	50	217	0	0	182	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	902	0	0	267	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					43.5			15.1			15.1	
Actuated g/C Ratio					0.64			0.22			0.22	
v/c Ratio					0.74			0.83			0.60	
Control Delay (s/veh)					15.3			46.1			24.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					15.3			46.1			24.7	
LOS					B			D			C	
Approach Delay (s/veh)					15.3			46.1			24.7	
Approach LOS					B			D			C	
Queue Length 50th (ft)					217			106			81	
Queue Length 95th (ft)					#548			164			131	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					1212			621			807	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.74			0.43			0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 22.7		Intersection LOS: C	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 30: Girard Blvd & Lead Ave



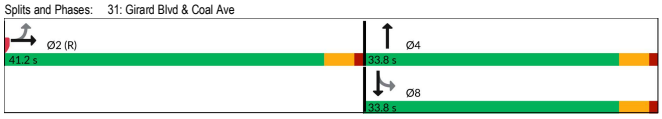
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Future Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.992						0.973				
Flt Protected		0.996									0.990	
Satd. Flow (prot)	0	1874	0	0	0	0	0	1841	0	0	1881	0
Flt Permitted		0.996									0.724	
Satd. Flow (perm)	0	1874	0	0	0	0	0	1841	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6						20				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1						2			2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	802	57	0	0	0	0	182	46	46	177	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	943	0	0	0	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3			14.3	
Actuated g/C Ratio		0.69						0.19			0.19	
v/c Ratio		0.73						0.62			0.85	
Control Delay (s/veh)		24.8						32.2			56.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		24.8						32.2			56.6	
LOS		C						C			E	
Approach Delay (s/veh)		24.8						32.2			56.6	
Approach LOS		C						C			E	
Queue Length 50th (ft)		447						89			101	
Queue Length 95th (ft)		m471						142			162	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1294						731			537	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.73						0.31			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 31.1		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 31: Girard Blvd & Coal Ave

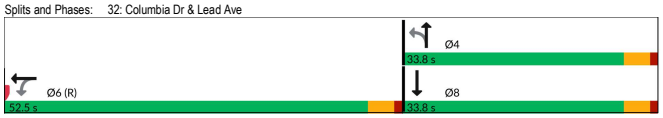


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	812	16	12	23	0	0	15	19
Future Volume (vph)	0	0	0	32	812	16	12	23	0	0	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.98	
Frt					0.997						0.925	
Flt Protected					0.998			0.983				
Satd. Flow (prot)	0	0	0	0	1889	0	0	1868	0	0	1722	0
Flt Permitted					0.998			0.936				
Satd. Flow (perm)	0	0	0	0	1889	0	0	1777	0	0	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	846	17	13	24	0	0	16	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	896	0	0	37	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.85			0.06			0.06	
Control Delay (s/veh)					26.1			19.7			12.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					26.1			19.7			12.0	
LOS					C			B			B	
Approach Delay (s/veh)					26.1			19.7			12.0	
Approach LOS					C			B			B	
Queue Length 50th (ft)					382			13			6	
Queue Length 95th (ft)					#649			34			26	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1051			603			597	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.85			0.06			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 25.4		Intersection LOS: C	
Intersection Capacity Utilization 73.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 32: Columbia Dr & Lead Ave

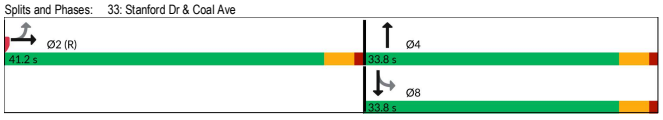


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Future Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			0.99	
Frt		0.999						0.927				
Flt Protected		0.999									0.966	
Satd. Flow (prot)	0	1896	0	0	0	0	0	1733	0	0	1835	0
Flt Permitted		0.999									0.896	
Satd. Flow (perm)	0	1896	0	0	0	0	0	1733	0	0	1689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2			3			3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	872	6	0	0	0	0	6	7	14	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	0	0	0	0	0	13	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.97						0.02			0.03	
Control Delay (s/veh)		44.6						10.7			14.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		44.6						10.7			14.4	
LOS		D						B			B	
Approach Delay (s/veh)		44.6						10.7			14.4	
Approach LOS		D						B			B	
Queue Length 50th (ft)		386						2			6	
Queue Length 95th (ft)		#653						12			18	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		928						681			659	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.97						0.02			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 43.5		Intersection LOS: D	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 33: Stanford Dr & Coal Ave

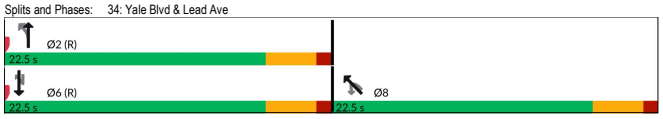


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	117	188	0	0	177	181	0	0	0	204	686	26
Future Volume (vph)	117	188	0	0	177	181	0	0	0	204	686	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	0		25	0		0	70		0
Storage Lanes	1		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.995	
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	1863	0	0	1863	1583	0	0	0	1770	1853	0
Flt Permitted	0.641									0.950		
Satd. Flow (perm)	1194	1863	0	0	1863	1583	0	0	0	1770	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102					5	
Link Speed (mph)		25			30			30			30	
Link Distance (ft)		852			1274			140			171	
Travel Time (s)		23.2			29.0			3.2			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	122	196	0	0	184	189	0	0	0	213	715	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	196	0	0	184	189	0	0	0	213	742	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		2			6						8	
Permitted Phases	2					6				8		
Minimum Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (s)	22.5	22.5			22.5	22.5				22.5	22.5	
Total Split (%)	50.0%	50.0%			50.0%	50.0%				50.0%	50.0%	
Maximum Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Yellow Time (s)	3.5	3.5			3.5	3.5				3.5	3.5	
All-Red Time (s)	1.0	1.0			1.0	1.0				1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5	4.5				4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0			7.0	7.0				7.0	7.0	
Flash Don't Walk (s)	11.0	11.0			11.0	11.0				11.0	11.0	
Pedestrian Calls (#/hr)	0	0			0	0				0	0	
Act Effct Green (s)	18.0	18.0			18.0	18.0				18.0	18.0	
Actuated g/C Ratio	0.40	0.40			0.40	0.40				0.40	0.40	
v/c Ratio	0.26	0.26			0.25	0.27				0.30	1.00	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay (s/veh)	5.1	4.8			10.1	5.9				10.7	50.6	
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	
Total Delay (s/veh)	5.1	4.8			10.1	5.9				10.7	50.6	
LOS	A	A			B	A				B	D	
Approach Delay (s/veh)		4.9			8.0						41.7	
Approach LOS		A			A						D	
Queue Length 50th (ft)	8	13			30	13				35	179	
Queue Length 95th (ft)	m13	m20			62	43				72	#381	
Internal Link Dist (ft)		772			1194			60			91	
Turn Bay Length (ft)	120					25				70		
Base Capacity (vph)	477	745			745	694				708	744	
Starvation Cap Reductn	0	0			0	0				0	0	
Spillback Cap Reductn	0	0			0	0				0	0	
Storage Cap Reductn	0	0			0	0				0	0	
Reduced v/c Ratio	0.26	0.26			0.25	0.27				0.30	1.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 27.0		Intersection LOS: C	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 34: Yale Blvd & Lead Ave



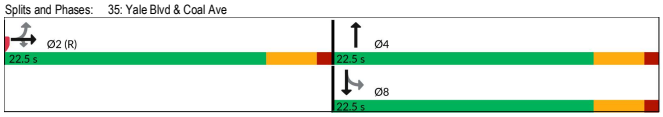
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Future Volume (vph)	47	740	149	0	0	0	0	281	194	38	323	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97					0.99		1.00		
Frt			0.850					0.945				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1785	0	1805	1900	0
Flt Permitted	0.950									0.268		
Satd. Flow (perm)	1798	3610	1572	0	0	0	0	1785	0	508	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155					82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			852	
Travel Time (s)		13.3			8.9			12.4			19.4	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	771	155	0	0	0	0	293	202	40	336	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	771	155	0	0	0	0	495	0	40	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	21.1	21.1	21.1					14.9		14.9	14.9	
Actuated g/C Ratio	0.47	0.47	0.47					0.33		0.33	0.33	
v/c Ratio	0.06	0.46	0.19					0.77		0.24	0.53	
Control Delay (s/veh)	8.3	10.0	2.8					19.2		17.3	18.6	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	8.3	10.0	2.8					19.2		17.3	18.6	
LOS	A	B	A					B		B	B	
Approach Delay (s/veh)		8.8						19.2			18.4	
Approach LOS		A						B			B	
Queue Length 50th (ft)	7	67	0					87		7	90	
Queue Length 95th (ft)	22	115	24					159		34	155	
Internal Link Dist (ft)		507			310			465			772	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	842	1691	818					763		203	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.06	0.46	0.19					0.65		0.20	0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			

Intersection Signal Delay (s/veh): 13.6	Intersection LOS: B
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

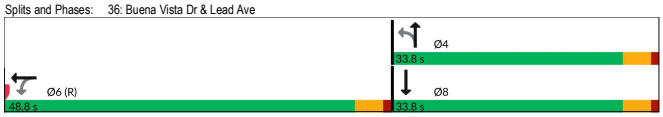


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	713	17	78	22	0	0	8	11
Future Volume (vph)	0	0	0	17	713	17	78	22	0	0	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.997						0.922	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	3592	0	0	1830	0	0	1735	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	3591	0	0	1503	0	0	1735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	743	18	81	23	0	0	8	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	779	0	0	104	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.40			0.20			0.03	
Control Delay (s/veh)					12.1			19.8			11.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.1			19.8			11.9	
LOS					B			B			B	
Approach Delay (s/veh)					12.1			19.8			11.9	
Approach LOS					B			B			B	
Queue Length 50th (ft)					116			37			3	
Queue Length 95th (ft)					156			73			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1927			533			622	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.40			0.20			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 45.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

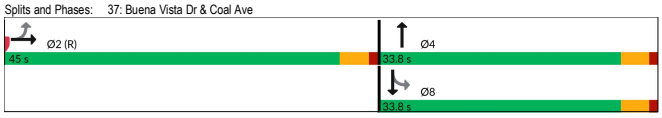


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	775	43	0	0	0	0	62	34	17	18	0
Future Volume (vph)	35	775	43	0	0	0	0	62	34	17	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.992						0.953				
Flt Protected		0.998									0.976	
Satd. Flow (prot)	0	3567	0	0	0	0	0	1799	0	0	1854	0
Flt Permitted		0.998									0.795	
Satd. Flow (perm)	0	3565	0	0	0	0	0	1799	0	0	1503	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	807	45	0	0	0	0	65	35	18	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	888	0	0	0	0	0	100	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.4						8.8			8.8	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.30						0.43			0.22	
Control Delay (s/veh)		2.8						28.2			34.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.8						28.2			34.7	
LOS		A						C			C	
Approach Delay (s/veh)		2.8						28.2			34.7	
Approach LOS		A						C			C	
Queue Length 50th (ft)		46						30			17	
Queue Length 95th (ft)		81						73			43	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2914						690			558	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.30						0.14			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 6.4		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	668	96	1	93	322	0	0	436
Future Volume (vph)	0	0	0	53	668	96	1	93	322	0	0	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	0.91	1.00	1.00	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850						0.972
Flt Protected					0.996			0.950				
Satd. Flow (prot)	0	0	0	0	3596	1615	0	1805	5187	0	0	5042
Flt Permitted					0.996			0.341				
Satd. Flow (perm)	0	0	0	0	3595	1589	0	648	5187	0	0	5042
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						100						66
Link Speed (mph)		30			30				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		48.6			22.7				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	55	696	100	1	97	335	0	0	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	751	100	0	98	335	0	0	558
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	2			2
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	20	100			100
Trailing Detector (ft)				0	0	0	0	0	0			0
Detector 1 Position(ft)				0	0	0	0	0	0			0
Detector 1 Size(ft)				20	6	20	20	20	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94				94			94
Detector 2 Size(ft)					6				6			6
Detector 2 Type					Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	104
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0				0.0			0.0
Turn Type				Perm	NA	Perm	custom	pm+pt	NA			NA
Protected Phases					6			7	4			8
Permitted Phases				6		6	7	4				
Detector Phase				6	6	6	7	7	4			8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	20.0%	50.0%			30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	11.0	33.0			18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.0	3.5			3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0	1.0			1.0
Lost Time Adjust (s)					0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)					5.5	5.5		4.0	4.5			4.5
Lead/Lag							Lead	Lead				Lag
Lead-Lag Optimize?							Yes	Yes				Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0			7.0			7.0
Flash Don't Walk (s)				23.0	23.0	23.0			10.0			10.0
Pedestrian Calls (#/hr)				0	0	0			0			0
Act Effct Green (s)					32.0	32.0		33.5	33.0			24.3
Actuated g/C Ratio					0.43	0.43		0.45	0.44			0.32
v/c Ratio					0.49	0.14		0.25	0.15			0.33
Control Delay (s/veh)					16.9	3.6		14.0	12.8			18.4
Queue Delay					0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)					16.9	3.6		14.0	12.8			18.4
LOS					B	A		B	B			B
Approach Delay (s/veh)					15.4				13.1			18.4
Approach LOS					B				B			B
Queue Length 50th (ft)					128	0		26	32			64
Queue Length 95th (ft)					176	25		52	49			97
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125				
Base Capacity (vph)					1533	735		459	2282			1675
Starvation Cap Reductn					0	0		0	0			0
Spillback Cap Reductn					0	0		0	0			0
Storage Cap Reductn					0	0		0	0			0
Reduced v/c Ratio					0.49	0.14		0.21	0.15			0.33

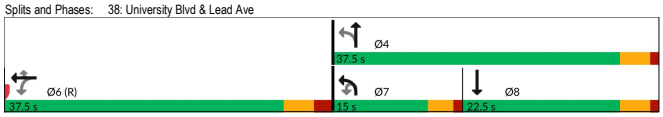
Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	

Intersection Signal Delay (s/veh): 15.8	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



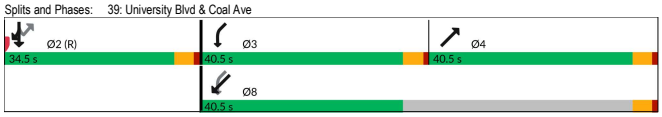
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	655	76	0	324	114	119	349	0
Future Volume (vph)	0	0	0	32	655	76	0	324	114	119	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.462		
Satd. Flow (perm)	0	0	0	1803	3610	1615	0	5187	1579	877	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			119			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	682	79	0	338	119	124	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	682	79	0	338	119	124	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.07	0.73	0.17		0.21	0.08	0.14	0.11	
Control Delay (s/veh)				32.9	44.3	13.8		29.7	0.1	7.5	7.2	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.9	44.3	13.8		29.7	0.1	7.5	7.2	
LOS				C	D	B		C	A	A	A	
Approach Delay (s/veh)					40.8			22.0			7.3	
Approach LOS					D			C			A	
Queue Length 50th (ft)				19	244	12		67	0	31	32	
Queue Length 95th (ft)				44	313	51		93	0	53	45	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				468	937	461		1616	1579	870	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.07	0.73	0.17		0.21	0.08	0.14	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Intersection Signal Delay (s/veh): 26.5	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

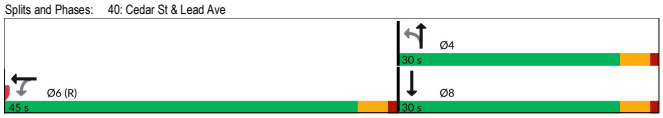


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	887	18	6	25	0	0	25	199
Future Volume (vph)	0	0	0	19	887	18	6	25	0	0	25	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.997						0.880	
Flt Protected					0.999			0.991				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1883	0	0	1650	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1681	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						113	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		8.2			48.6			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	20	924	19	6	26	0	0	26	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	963	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					54.7			11.3			11.3	
Actuated g/C Ratio					0.73			0.15			0.15	
v/c Ratio					0.37			0.13			0.68	
Control Delay (s/veh)					3.6			26.7			25.5	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					3.6			26.7			25.5	
LOS					A			C			C	
Approach Delay (s/veh)					3.6			26.7			25.5	
Approach LOS					A			C			C	
Queue Length 50th (ft)					48			13			53	
Queue Length 95th (ft)					100			33			112	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2624			571			635	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.37			0.06			0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 8.4		Intersection LOS: A	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

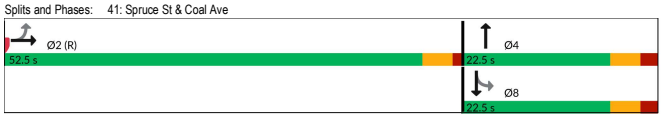


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	746	6	0	0	0	0	2	4	17	12	0
Future Volume (vph)	11	746	6	0	0	0	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1703	0	0	1847	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	3601	0	0	0	0	0	1703	0	0	1874	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	777	6	0	0	0	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	794	0	0	0	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		67.8						8.0			8.0	
Actuated g/C Ratio		0.90						0.11			0.11	
v/c Ratio		0.24						0.03			0.16	
Control Delay (s/veh)		1.6						23.2			32.5	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.6						23.2			32.5	
LOS		A						C			C	
Approach Delay (s/veh)		1.6						23.2			32.5	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			13	
Queue Length 95th (ft)		61						12			38	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3255						389			424	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.24						0.02			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 2.9		Intersection LOS: A	
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	522	656	74	555	0	0	0	0
Future Volume (vph)	0	0	0	0	522	656	74	555	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1585	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						143	77					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		7.7			8.3			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	544	683	77	578	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	544	683	77	578	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

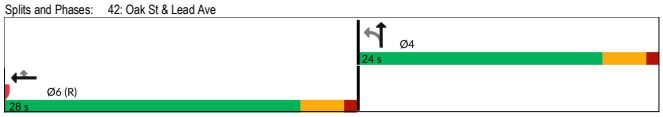
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					29.4	29.4	13.6	13.6				
Actuated g/C Ratio					0.57	0.57	0.26	0.26				
v/c Ratio					0.19	0.71	0.15	0.61				
Control Delay (s/veh)					6.4	13.9	4.5	19.3				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.4	13.9	4.5	19.3				
LOS					A	B	A	B				
Approach Delay (s/veh)					10.6			17.5				
Approach LOS					B			B				
Queue Length 50th (ft)					25	98	0	82				
Queue Length 95th (ft)					49	#326	20	106				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2934	958	725	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.19	0.71	0.11	0.43				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 24 (46%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	

Intersection Signal Delay (s/veh): 13.0	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	726	0	0	0	0	0	226	73	0	0	0
Future Volume (vph)	401	726	0	0	0	0	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.963				
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	4995	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	4995	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	418							76				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	418	756	0	0	0	0	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	756	0	0	0	0	0	311	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2				
Detector Template	Left	Thru						Thru				
Leading Detector (ft)	20	100						100				
Trailing Detector (ft)	0	0						0				
Detector 1 Position(ft)	0	0						0				
Detector 1 Size(ft)	20	6						6				
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0				
Detector 1 Queue (s)	0.0	0.0						0.0				
Detector 1 Delay (s)	0.0	0.0						0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA				
Protected Phases		2						4				
Permitted Phases	2											
Detector Phase	2	2						4				
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0				
Minimum Split (s)	22.5	22.5						22.5				
Total Split (s)	22.5	22.5						22.5				
Total Split (%)	50.0%	50.0%						50.0%				
Maximum Green (s)	18.0	18.0						17.0				
Yellow Time (s)	3.5	3.5						4.5				
All-Red Time (s)	1.0	1.0						1.0				
Lost Time Adjust (s)	0.0	0.0						0.0				
Total Lost Time (s)	4.5	4.5						5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0				
Recall Mode	C-Max	C-Max						None				
Walk Time (s)	7.0	7.0						7.0				
Flash Don't Walk (s)	10.0	10.0						10.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)	25.0	25.0						10.0				
Actuated g/C Ratio	0.56	0.56						0.22				
v/c Ratio	0.35	0.38						0.27				
Control Delay (s/veh)	1.6	6.3						11.5				
Queue Delay	0.0	0.0						0.0				
Total Delay (s/veh)	1.6	6.3						11.5				
LOS	A	A						B				
Approach Delay (s/veh)		4.6						11.5				
Approach LOS		A						B				
Queue Length 50th (ft)	0	48						18				
Queue Length 95th (ft)	26	75						35				
Internal Link Dist (ft)		272				1003		96				282
Turn Bay Length (ft)	100											
Base Capacity (vph)	1188	2005						1934				
Starvation Cap Reductn	0	0						0				
Spillback Cap Reductn	0	0						0				
Storage Cap Reductn	0	0						0				
Reduced v/c Ratio	0.35	0.38						0.16				

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 6.1		Intersection LOS: A	

Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

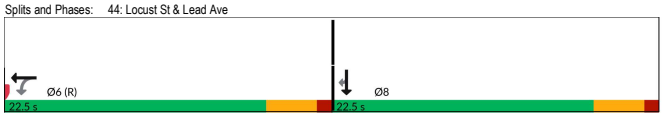
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	488	0	0	0	0	0	300	553
Future Volume (vph)	0	0	0	175	488	0	0	0	0	0	300	553
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor											0.99	0.99
Frt											0.928	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1787	3610	0	0	0	0	0	3188	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1787	3610	0	0	0	0	0	3188	1450
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				182							207	207
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Peds. (#/hr)	1			1			1		1	2		2
Confl. Bikes (#/hr)				1		10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	182	508	0	0	0	0	0	313	576
Shared Lane Traffic (%)												50%
Lane Group Flow (vph)	0	0	0	182	508	0	0	0	0	0	601	288
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.0	22.0						14.0	14.0
Actuated g/C Ratio				0.49	0.49						0.31	0.31
v/c Ratio				0.19	0.29						0.53	0.49
Control Delay (s/veh)				2.5	8.2						9.4	6.6
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.5	8.2						9.4	6.6
LOS				A	A						A	A
Approach Delay (s/veh)					6.7						8.5	
Approach LOS					A						A	
Queue Length 50th (ft)				0	36						43	16
Queue Length 95th (ft)				26	73						66	54
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)				300								
Base Capacity (vph)				968	1768						1399	704
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.19	0.29						0.43	0.41

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Intersection Signal Delay (s/veh): 7.7	Intersection LOS: A
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 44: Locust St & Lead Ave



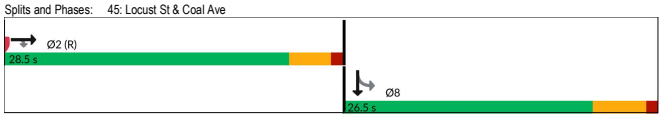
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	95	0	0	0	0	0	0	326	177	0
Future Volume (vph)	0	807	95	0	0	0	0	0	0	326	177	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor			0.98									
Frt			0.850									
Flt Protected										0.950	0.977	
Satd. Flow (prot)	0	3610	1615	0	0	0	0	0	0	1643	3378	0
Flt Permitted										0.950	0.977	
Satd. Flow (perm)	0	3610	1586	0	0	0	0	0	0	1643	3378	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			99							84	84	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	841	99	0	0	0	0	0	0	340	184	0
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	841	99	0	0	0	0	0	0	173	351	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							20	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							20	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									8	
Permitted Phases			2							8		
Detector Phase		2	2							8	8	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		28.5	28.5							26.5	26.5	
Total Split (s)		28.5	28.5							26.5	26.5	
Total Split (%)		51.8%	51.8%							48.2%	48.2%	
Maximum Green (s)		24.0	24.0							21.0	21.0	
Yellow Time (s)		3.5	3.5							4.5	4.5	
All-Red Time (s)		1.0	1.0							1.0	1.0	
Lost Time Adjust (s)		0.0	0.0							0.0	0.0	
Total Lost Time (s)		4.5	4.5							5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0	2.0							2.0	2.0	
Recall Mode		C-Max	C-Max							None	None	
Walk Time (s)		7.0	7.0							7.0	7.0	
Flash Don't Walk (s)		13.0	13.0							10.0	10.0	
Pedestrian Calls (#/hr)		0	0							0	0	
Act Effct Green (s)		34.0	34.0							11.0	11.0	
Actuated g/C Ratio		0.62	0.62							0.20	0.20	
v/c Ratio		0.38	0.10							0.44	0.47	
Control Delay (s/veh)		6.1	1.7							14.1	16.6	
Queue Delay		0.0	0.0							0.0	0.0	
Total Delay (s/veh)		6.1	1.7							14.1	16.6	
LOS		A	A							B	B	
Approach Delay (s/veh)		5.6									15.8	
Approach LOS		A									B	
Queue Length 50th (ft)		56	0							28	43	
Queue Length 95th (ft)		104	15							71	70	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)			100									
Base Capacity (vph)		2231	1018							679	1341	
Starvation Cap Reductn		0	0							0	0	
Spillback Cap Reductn		0	0							0	0	
Storage Cap Reductn		0	0							0	0	
Reduced v/c Ratio		0.38	0.10							0.25	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	

Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 45: Locust St & Coal Ave



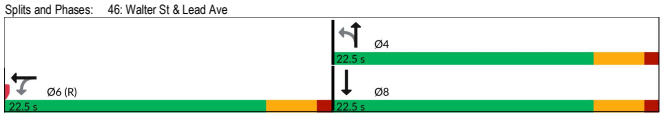
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Future Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.946	
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1870	0	0	1788	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3597	0	0	1900	0	0	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	24	964	16	3	6	0	0	6	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1004	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.30			0.03			0.03	
Control Delay (s/veh)					1.8			24.6			13.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.8			24.6			13.4	
LOS					A			C			B	
Approach Delay (s/veh)					1.8			24.6			13.4	
Approach LOS					A			C			B	
Queue Length 50th (ft)					0			2			1	
Queue Length 95th (ft)					110			m12			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3325			760			717	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.30			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave

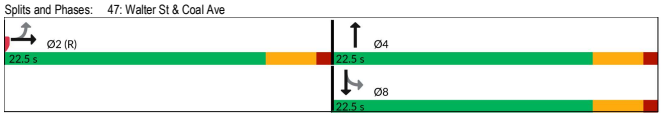


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Future Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.999						0.908				
Flt Protected											0.994	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1725	0	0	1889	0
Flt Permitted											0.957	
Satd. Flow (perm)	0	3606	0	0	0	0	0	1725	0	0	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						15				
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		844			715			226			362	
Travel Time (s)		19.2			16.3			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	869	4	0	0	0	0	7	15	4	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	876	0	0	0	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)								8.0		8.0	8.0	
Minimum Split (s)								22.5		22.5	22.5	
Total Split (s)								22.5		22.5	22.5	
Total Split (%)								50.0%		50.0%	50.0%	
Maximum Green (s)								18.0		18.0	18.0	
Yellow Time (s)								3.5		3.5	3.5	
All-Red Time (s)								1.0		1.0	1.0	
Lost Time Adjust (s)								0.0			0.0	
Total Lost Time (s)								4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)								2.0		2.0	2.0	
Recall Mode								None		None	None	
Walk Time (s)								7.0		7.0	7.0	
Flash Don't Walk (s)								10.0		10.0	10.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)								8.0			8.0	
Actuated g/C Ratio								0.18			0.18	
v/c Ratio								0.07			0.11	
Control Delay (s/veh)								11.1			19.7	
Queue Delay								0.0			0.0	
Total Delay (s/veh)								11.1			19.7	
LOS								B			B	
Approach Delay (s/veh)								11.1			19.7	
Approach LOS								B			B	
Queue Length 50th (ft)								2			9	
Queue Length 95th (ft)								15			31	
Internal Link Dist (ft)								146			282	
Turn Bay Length (ft)												
Base Capacity (vph)								699			727	
Starvation Cap Reductn								0			0	
Spillback Cap Reductn								0			0	
Storage Cap Reductn								0			0	
Reduced v/c Ratio								0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Future Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1805	3610	0	0	3610
Flt Permitted				0.950				0.340				
Satd. Flow (perm)	0	0	0	1803	3610	1583	0	646	3610	0	0	3610
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						52						
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	73	806	70	1	108	438	0	0	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	806	70	0	109	438	0	0	553
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	144
Future Volume (vph)	144
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	117
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	150
Shared Lane Traffic (%)	
Lane Group Flow (vph)	150
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

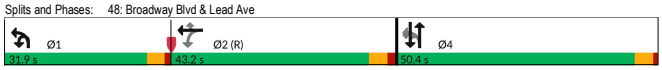
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				43.2	43.2	43.2	26.4	26.4	50.4			50.4
Total Split (s)				43.2	43.2	43.2	31.9	31.9	50.4			50.4
Total Split (%)				34.4%	34.4%	34.4%	25.4%	25.4%	40.2%			40.2%
Maximum Green (s)				38.2	38.2	38.2	27.4	27.4	45.9			45.9
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				61.4	61.4	61.4		50.1	45.9			45.9
Actuated g/C Ratio				0.49	0.49	0.49		0.40	0.37			0.37
v/c Ratio				0.08	0.46	0.09		0.37	0.33			0.42
Control Delay (s/veh)				17.5	22.2	6.8		28.8	29.6			31.0
Queue Delay				0.0	0.0	0.0		0.0	0.9			0.0
Total Delay (s/veh)				17.5	22.2	6.8		28.8	30.6			31.0
LOS				B	C	A		C	C			C
Approach Delay (s/veh)					20.7				30.2			26.2
Approach LOS					C				C			C
Queue Length 50th (ft)				31	220	7		52	134			175
Queue Length 95th (ft)				58	275	33		90	178			227
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				881	1765	800		630	1320			1320
Starvation Cap Reductn				0	0	0		0	597			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.08	0.46	0.09		0.17	0.61			0.42

Intersection Summary	
Area Type:	Other
Cycle Length: 125.5	
Actuated Cycle Length: 125.5	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.23
Control Delay (s/veh)	8.6
Queue Delay	0.0
Total Delay (s/veh)	8.6
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	17
Queue Length 95th (ft)	63
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	649
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.23
Intersection Summary	

Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Future Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.98		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	0	1805	3610
Flt Permitted	0.950										0.383	
Satd. Flow (perm)	1796	3610	1576	0	0	0	0	3610	1591	0	727	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			80						64			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			261			421				359
Travel Time (s)		10.8			5.9			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	688	80	0	0	0	0	488	60	2	95	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	688	80	0	0	0	0	488	60	0	97	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7					41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	37.7	37.7	37.7					41.8	41.8		67.8	41.8
Actuated g/C Ratio	0.31	0.31	0.31					0.35	0.35		0.57	0.35
v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.42
Control Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	31.2
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	1.4
Total Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		12.0	32.5
LOS	C	D	A					C	A		B	C
Approach Delay (s/veh)		34.1						27.9				29.4
Approach LOS		C						C				C
Queue Length 50th (ft)	28	236	0					148	0		30	164
Queue Length 95th (ft)	59	301	36					196	28		53	215
Internal Link Dist (ft)		395			181			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	564	1134	549					1257	595		639	1257
Starvation Cap Reductn	0	0	0					0	0		0	501
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.70

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 0.61
Intersection Signal Delay (s/veh): 30.9 Intersection LOS: C
Intersection Capacity Utilization 64.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	113	490
Future Volume (vph)	42	46	513	33	113	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.991
Satd. Flow (prot)	1726	0	1885	0	0	1883
Flt Permitted	0.977					0.991
Satd. Flow (perm)	1726	0	1885	0	0	1883
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	118	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	628
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990			0.974			0.996			0.986	
Flt Protected		0.992			0.990			0.998			0.997	
Satd. Flow (prot)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.992			0.990			0.998			0.997	
Satd. Flow (perm)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5				2		2	2		2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	106	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 36.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.968			0.997			0.997	
Flt Protected		0.998			0.986		0.950			0.950		
Satd. Flow (prot)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.998			0.986		0.950			0.950		
Satd. Flow (perm)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	99	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.7%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	87	11	15	15	6	2
Future Volume (vph)	87	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.985				0.966	
Flt Protected	0.957			0.976		
Satd. Flow (prot)	1791	0	0	1854	1835	0
Flt Permitted	0.957			0.976		
Satd. Flow (perm)	1791	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	91	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.7%	ICU Level of Service A	
Analysis Period (min)	15		

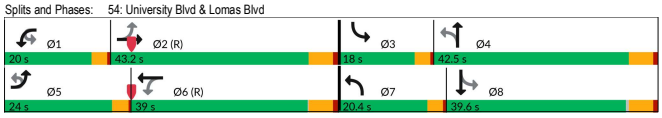
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

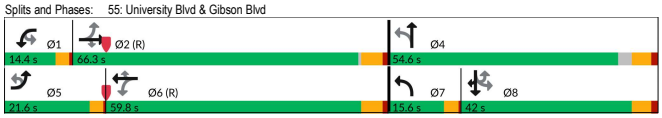
Intersection Summary
Area Type: Other
Cycle Length: 139
Actuated Cycle Length: 139
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay (s/veh): 22.9 Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	482	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	482	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.92			1.00		0.99	0.96		
Frt				0.850			0.994			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3585	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	268	1900	1489	0	500	3585	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	502	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	523	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.87	0.47	0.09		0.68	0.37		0.22	0.80		
Control Delay (s/veh)		919.7	28.1	1.7		102.7	30.0		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		919.7	28.1	1.7		102.7	30.0		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			236.4				35.5			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~238	282	0		35	169		28	193		
Queue Length 95th (ft)		#401	410	12		#104	217		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		55	938	786		69	1409		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.87	0.47	0.09		0.62	0.37		0.18	0.66		

Intersection Summary	
Area Type:	Other
Cycle Length: 134.8	
Actuated Cycle Length: 134.8	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.87	

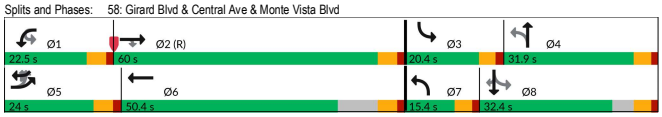
Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 107.2	Intersection LOS: F
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1092	0	0	0
Future Volume (vph)	0	0	1092	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		8.3	8.2		2.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	1138	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1138	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)		1	1			1						4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

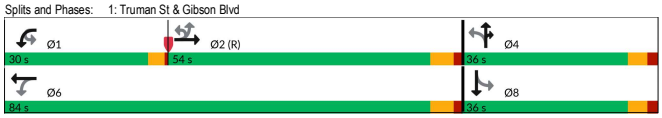
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	
Intersection Summary		

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

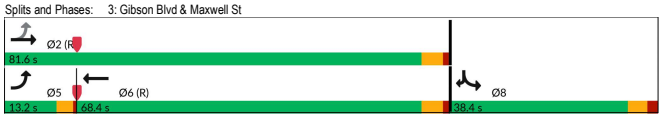
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58

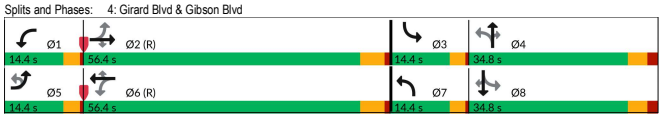
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

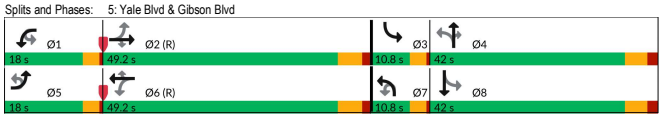
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4	Intersection LOS: C
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

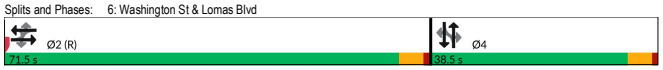
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.4		Intersection LOS: B	
Intersection Capacity Utilization 71.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



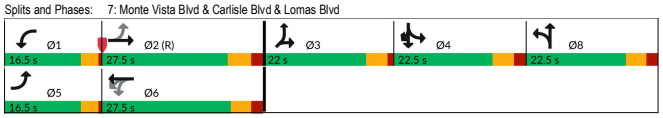
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			350	
Travel Time (s)	17.3			6.8	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			270	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

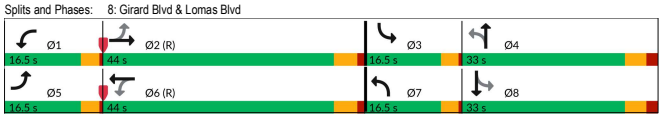
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.4		Intersection LOS: C	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

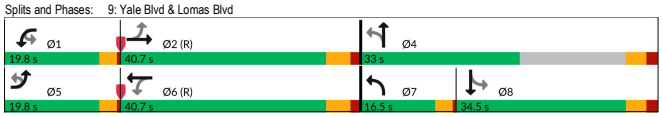
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08

Intersection Summary	

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



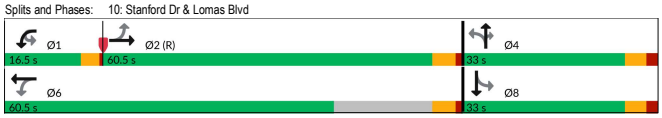
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

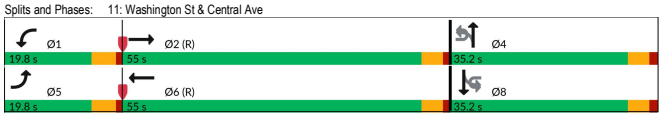
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	45	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	45	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			688			3147
Travel Time (s)		26.6				18.1			15.6			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	48	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	48	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.40	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		51.8	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		51.8	52.4		31.2	42.3
LOS	D	B			D	A		D	D		C	D
Approach Delay (s/veh)		16.5				10.3			52.3			41.2
Approach LOS		B				B			D			D
Queue Length 50th (ft)	18	25			12	56		31	106		12	119
Queue Length 95th (ft)	44	193			33	110		67	166		32	182
Internal Link Dist (ft)		1288				848			608			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.21	0.31		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 28.0		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	275	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	275	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998				0.999			0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1898	0	0	1832	0	0
Flt Permitted		0.950				0.950				0.936		
Satd. Flow (perm)	0	1879	1895	0	0	1886	1898	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	293	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	294	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

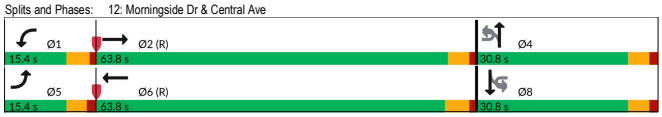
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.19			0.36		
Control Delay (s/veh)		44.9	2.3			55.7	2.9			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			55.7	2.9			49.7		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			4.4				3.5			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m10	107			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1586			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.19			0.12		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.36
Intersection Signal Delay (s/veh): 10.4 Intersection LOS: B
Intersection Capacity Utilization 41.7% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

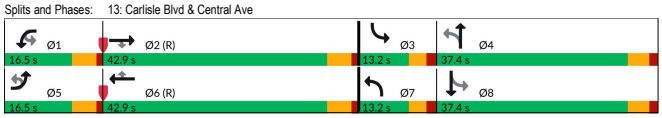
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	262	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	262	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	818	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	279	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	279	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.26	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.4	16.0	0.2		76.8	20.1	0.3	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.4	16.0	0.2		76.8	20.1	0.3	29.0	51.2		30.0
LOS		E	B	A		E	C	A	C	D		C
Approach Delay (s/veh)			21.5				26.5			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		31	81	0	12	123		19
Queue Length 95th (ft)		65	91	1		72	203	1	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.26	0.01	0.09	0.33		0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 34.6		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	276	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	276	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996				0.999			0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1898	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1877	1891	0	0	1900	1898	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	294	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	295	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.17			0.17		
Control Delay (s/veh)		52.8	1.8			45.7	1.4			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			45.7	1.4			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				3.1			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			7	0			11		
Queue Length 95th (ft)		25	45			m29	27			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		185	1711			188	1721			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.17			0.05		

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.17	

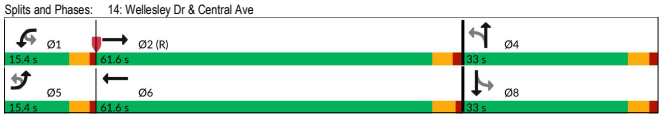
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.2	Intersection LOS: A
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	262	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	262	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.996			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1891	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1891	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	279	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	286	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

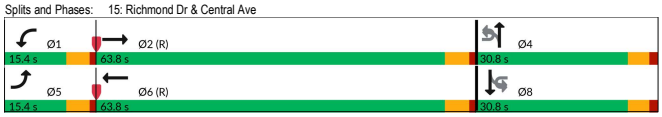
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.17			0.18		
Control Delay (s/veh)		48.6	2.5			46.6	0.4			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			46.6	0.4			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.0			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			6	0			14		
Queue Length 95th (ft)		15	85			27	7			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1719			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.17			0.06		

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	
Intersection Summary		

Intersection Signal Delay (s/veh): 5.4	Intersection LOS: A
Intersection Capacity Utilization 32.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	333	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	333	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.988			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3559	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1531	3577	0	0	1886	3559	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				12			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	354	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	384	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.13			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.1			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	68			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		227	3070			257	2871			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.13			0.03		

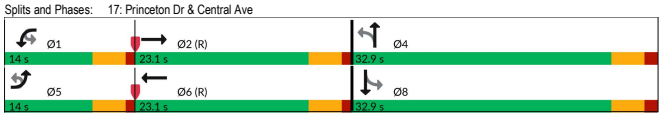
Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	351	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	351	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	373	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	378	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.12			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.4			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	62			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.12			0.04		0.01

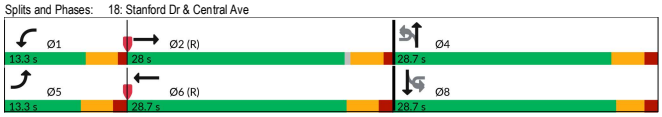
Intersection Summary	
Area Type:	Other
Cycle Length: 70.7	
Actuated Cycle Length: 70.7	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.13	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



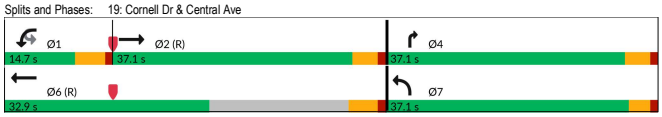
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	330	20	12
Future Volume (vph)	346	31	2	26	330	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	351	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	351	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.11	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				4.0	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	24	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.11	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.1	Intersection LOS: A
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	69	78	271	6	73	19	61	7	12
Future Volume (vph)	1	11	281	69	78	271	6	73	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.971			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3483	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.432			0.744	
Satd. Flow (perm)	0	1711	3483	0	1781	3596	0	813	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			24			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1232			105
Travel Time (s)			32.1			17.0			33.6			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	73	83	288	6	78	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	372	0	83	294	0	78	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	93.8		11.8	104.2		19.4	17.0	17.0	10.9	8.1
Actuated g/C Ratio		0.06	0.67		0.08	0.74		0.14	0.12	0.12	0.08	0.06
v/c Ratio		0.13	0.16		0.55	0.11		0.41	0.09	0.21	0.06	0.18
Control Delay (s/veh)		55.0	7.7		74.3	7.2		57.7	52.8	1.5	47.1	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.0	7.7		74.3	7.2		57.7	52.8	1.5	47.1	50.5
LOS		D	A		E	A		E	D	A	D	D
Approach Delay (s/veh)			9.3			22.0			34.7			49.6
Approach LOS			A			C			C			D
Queue Length 50th (ft)		10	67		74	33		62	15	0	5	11
Queue Length 95th (ft)		m28	98		127	80		109	43	0	19	39
Internal Link Dist (ft)			1332			670			1152			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2342		296	2677		240	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.16		0.28	0.11		0.33	0.04	0.13	0.04	0.05

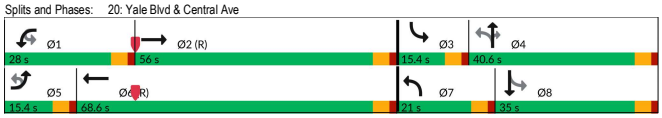
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.8	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Future Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.96	0.98		0.98	1.00		0.99
Frt			0.988				0.944			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1874	0	0	1805	3330	0	1805	5095	0	1805
Flt Permitted		0.348				0.221			0.530			0.247
Satd. Flow (perm)	0	656	1874	0	0	403	3330	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				95			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	232	20	4	36	215	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	252	0	0	40	343	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.8			19.9	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.42	0.26			0.70	0.18		0.14	0.69		0.49
Control Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.4				22.0			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	130			37	19		20	139		86
Queue Length 95th (ft)		57	237			81	73		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		84	976			61	1954		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.35	0.26			0.66	0.18		0.09	0.34		0.38

Intersection Summary

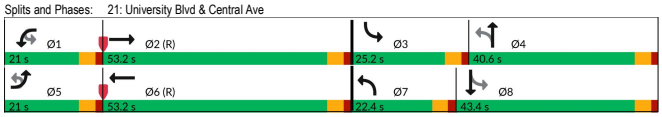
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.70

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	

Intersection Summary

Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Future Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93		0.95		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.610				0.564			0.950			
Satd. Flow (perm)	0	1081	1900	1538	0	1061	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							763	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	249	265	6	60	240	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	249	265	0	66	240	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

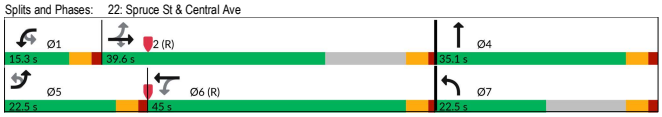
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.18	0.23		0.08	0.16		0.32		0.02	
Control Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			4.4				4.5			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	61	0		10	37		46		0	
Queue Length 95th (ft)		3	99	28		20	90		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		974	1351	1170		909	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.18	0.23		0.07	0.16		0.15		0.02	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 7.4	Intersection LOS: A
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	297	57	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	297	57	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300	120		0	128		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.976			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3507	0	1805	1856	0	1805	1734
Flt Permitted		0.499			0.548			0.693			0.711	
Satd. Flow (perm)	0	941	3610	1568	1037	3507	0	1314	1856	0	1350	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		28			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			323			403			427			373
Travel Time (s)			7.3			9.2			9.7			8.5
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	316	61	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	39.4%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		70.1	68.7	68.7	66.4	63.1		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.77	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.12	0.01	0.01	0.15		0.22	0.34		0.14	0.43
Control Delay (s/veh)		2.5	3.2	0.0	2.4	4.7		38.4	35.7		36.2	25.0
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.2	0.0	2.4	4.7		38.4	35.7		36.2	25.0
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			2.9			4.7			36.5			26.9
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	16	0	1	29		16	31		10	24
Queue Length 95th (ft)		18	47	0	3	54		41	69		30	68
Internal Link Dist (ft)			243			323			347			293
Turn Bay Length (ft)		300		300	120			128			100	
Base Capacity (vph)		958	2891	1270	906	2585		375	537		385	532
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.12	0.01	0.01	0.15		0.08	0.13		0.05	0.19

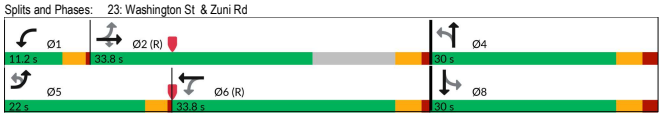
Intersection Summary	
Area Type:	Other
Cycle Length: 85.8	
Actuated Cycle Length: 85.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd

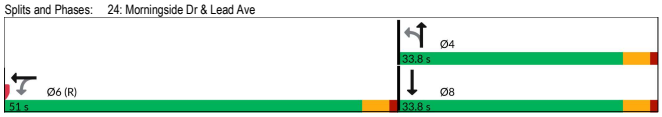


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	408	6	10	12	0	0	11	38
Future Volume (vph)	0	0	0	2	408	6	10	12	0	0	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.998						0.896	
Flt Protected								0.978				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1858	0	0	1681	0
Flt Permitted								0.921				
Satd. Flow (perm)	0	0	0	0	3602	0	0	1750	0	0	1681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						40	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.6			4.8			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	2	434	6	11	13	0	0	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	442	0	0	24	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.22			0.04			0.09	
Control Delay (s/veh)					10.2			18.8			8.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.2			18.8			8.8	
LOS					B			B			A	
Approach Delay (s/veh)					10.2			18.8			8.8	
Approach LOS					B			B			A	
Queue Length 50th (ft)					59			8			4	
Queue Length 95th (ft)					84			25			27	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1976			604			606	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.22			0.04			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay (s/veh): 10.4		Intersection LOS: B	
Intersection Capacity Utilization 33.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



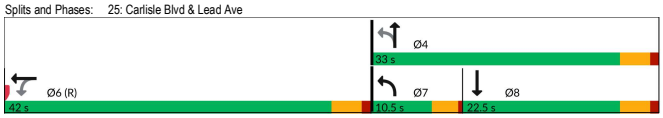
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	435	17	87	149	0	0	161	36
Future Volume (vph)	0	0	0	33	435	17	87	149	0	0	161	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.995						0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3578	0	1805	1900	0	0	1852	0
Flt Permitted					0.997		0.342					
Satd. Flow (perm)	0	0	0	0	3578	0	650	1900	0	0	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						14	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		30.8			27.8			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	35	463	18	93	159	0	0	171	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	516	0	93	159	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.3		21.7	20.7			12.4	
Actuated g/C Ratio					0.60		0.29	0.28			0.17	
v/c Ratio					0.24		0.33	0.30			0.66	
Control Delay (s/veh)					8.3		7.5	7.2			36.8	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					8.3		7.5	7.2			36.8	
LOS					A		A	A			D	
Approach Delay (s/veh)					8.3			7.3			36.8	
Approach LOS					A			A			D	
Queue Length 50th (ft)					55		6	10			86	
Queue Length 95th (ft)					96		9	14			141	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2165		295	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.24		0.32	0.22			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 14.1		Intersection LOS: B	

Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Future Volume (vph)	37	318	71	0	0	0	0	201	38	13	179	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.975						0.979				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	3492	0	0	0	0	0	1856	0	1805	1900	0
Flt Permitted		0.996								0.371		
Satd. Flow (perm)	0	3491	0	0	0	0	0	1856	0	705	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44						15				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		41.0			37.3			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	338	76	0	0	0	0	214	40	14	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	0	0	0	254	0	14	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

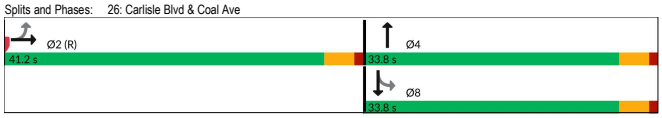
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3		14.3	14.3	
Actuated g/C Ratio		0.69						0.19		0.19	0.19	
v/c Ratio		0.19						0.70		0.11	0.53	
Control Delay (s/veh)		4.5						36.3		24.9	32.6	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		4.5						36.3		24.9	32.6	
LOS		A						D		C	C	
Approach Delay (s/veh)		4.5						36.3			32.1	
Approach LOS		A						D			C	
Queue Length 50th (ft)		29						105		7	95	
Queue Length 95th (ft)		59						161		m16	157	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2421						734		275	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.19						0.35		0.05	0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 56 (75%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 19.5	Intersection LOS: B
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Future Volume (vph)	9	366	0	0	0	0	0	9	40	4	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.890				
Flt Protected		0.999									0.986	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1691	0	0	1873	0
Flt Permitted		0.999									0.986	
Satd. Flow (perm)	0	3606	0	0	0	0	0	1691	0	0	1873	0
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1366			738			657			532	
Travel Time (s)		37.3			20.1			14.9			12.1	
Confl. Peds. (#/hr)				1		1						1
Confl. Bikes (#/hr)			3							2		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	389	0	0	0	0	0	10	43	4	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	0	0	0	0	53	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

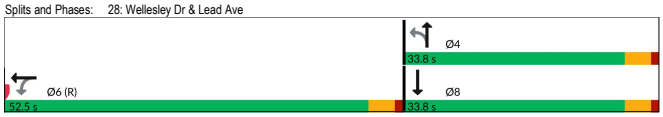
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	6	602	7	22	16	0	0	11	13
Future Volume (vph)	0	0	0	6	602	7	22	16	0	0	11	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.998						0.927	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	3601	0	0	1847	0	0	1742	0
Flt Permitted								0.885				
Satd. Flow (perm)	0	0	0	0	3600	0	0	1682	0	0	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						14	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		40.4			30.8			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	6	640	7	23	17	0	0	12	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	653	0	0	40	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.33			0.07			0.04	
Control Delay (s/veh)					10.9			19.8			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.9			19.8			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					10.9			19.8			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					93			15			4	
Queue Length 95th (ft)					127			36			21	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					2003			571			600	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.33			0.07			0.04	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.33
Intersection Signal Delay (s/veh): 11.5 Intersection LOS: B
Intersection Capacity Utilization 38.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: Wellesley Dr & Lead Ave

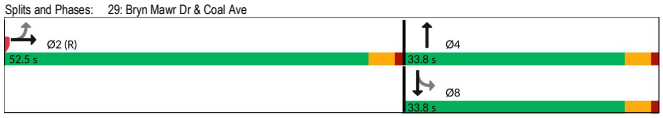


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Future Volume (vph)	14	494	6	0	0	0	0	6	4	5	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.998						0.946				
Flt Protected		0.999									0.976	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1788	0	0	1854	0
Flt Permitted		0.999									0.942	
Satd. Flow (perm)	0	3598	0	0	0	0	0	1788	0	0	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						4				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		30.5			41.0			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	526	6	0	0	0	0	6	4	5	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	547	0	0	0	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	
v/c Ratio		0.27						0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		10.4						15.7			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		10.4						15.7			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		10.4						15.7			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		75						2			4	
Queue Length 95th (ft)		105						13			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2002						609			607	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.27						0.02			0.02	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.27
Intersection Signal Delay (s/veh): 10.7 Intersection LOS: B
Intersection Capacity Utilization 28.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

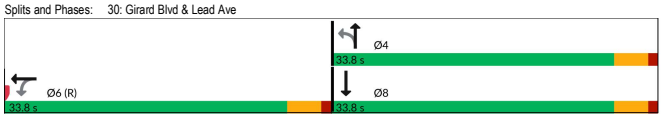


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	554	31	45	132	0	0	96	50
Future Volume (vph)	0	0	0	26	554	31	45	132	0	0	96	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			1.00	
Frt					0.992						0.954	
Flt Protected					0.998			0.987				
Satd. Flow (prot)	0	0	0	0	3570	0	0	1875	0	0	1804	0
Flt Permitted					0.998			0.874				
Satd. Flow (perm)	0	0	0	0	3570	0	0	1660	0	0	1804	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					10						49	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		30.9			40.4			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	28	589	33	48	140	0	0	102	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	650	0	0	188	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.4			12.2			12.2	
Actuated g/C Ratio					0.69			0.18			0.18	
v/c Ratio					0.26			0.63			0.42	
Control Delay (s/veh)					4.8			34.5			19.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					4.8			34.5			19.6	
LOS					A			C			B	
Approach Delay (s/veh)					4.8			34.5			19.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)					42			73			39	
Queue Length 95th (ft)					82			121			79	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					2453			719			809	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.26			0.26			0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 46.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

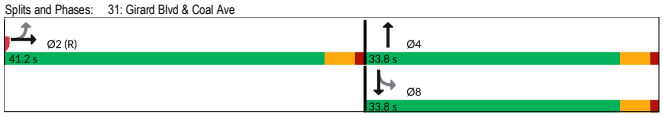


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Future Volume (vph)	38	398	24	0	0	0	0	139	29	18	99	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.992						0.977				
Flt Protected		0.996									0.992	
Satd. Flow (prot)	0	3562	0	0	0	0	0	1852	0	0	1885	0
Flt Permitted		0.996									0.929	
Satd. Flow (perm)	0	3562	0	0	0	0	0	1852	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11						17				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		40.9			30.5			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	423	26	0	0	0	0	148	31	19	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	489	0	0	0	0	0	179	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		54.5						11.5			11.5	
Actuated g/C Ratio		0.73						0.15			0.15	
v/c Ratio		0.19						0.60			0.46	
Control Delay (s/veh)		0.2						34.9			33.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.2						34.9			33.7	
LOS		A						C			C	
Approach Delay (s/veh)		0.2						34.9			33.7	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						71			54	
Queue Length 95th (ft)		0						122			95	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2593						733			689	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.19						0.24			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 53 (71%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave

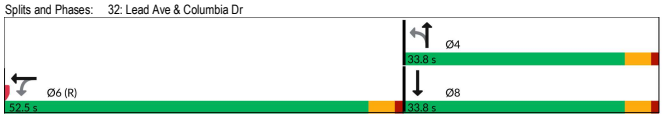


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	754	15	21	8	0	0	7	21
Future Volume (vph)	0	0	0	15	754	15	21	8	0	0	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.898	
Flt Protected					0.999			0.966				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1835	0	0	1706	0
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1644	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						22	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		32.6			30.9			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	802	16	22	9	0	0	7	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	834	0	0	31	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.42			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					11.8			19.7			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.8			19.7			10.2	
LOS					B			B			B	
Approach Delay (s/veh)					11.8			19.7			10.2	
Approach LOS					B			B			B	
Queue Length 50th (ft)					127			11			3	
Queue Length 95th (ft)					168			30			20	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					2000			558			593	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.42			0.06			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 12.0		Intersection LOS: B	
Intersection Capacity Utilization 37.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Lead Ave & Columbia Dr

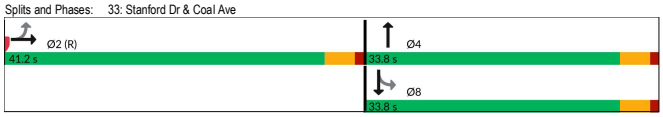


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Future Volume (vph)	18	477	6	0	0	0	0	4	8	5	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.998						0.907				
Flt Protected		0.998									0.973	
Satd. Flow (prot)	0	3594	0	0	0	0	0	1702	0	0	1849	0
Flt Permitted		0.998									0.939	
Satd. Flow (perm)	0	3594	0	0	0	0	0	1702	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						9				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		20.6			40.9			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	507	6	0	0	0	0	4	9	5	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	532	0	0	0	0	0	13	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.30						0.02			0.01	
Control Delay (s/veh)		12.0						9.7			14.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		12.0						9.7			14.1	
LOS		B						A			B	
Approach Delay (s/veh)		12.0						9.7			14.1	
Approach LOS		B						A			B	
Queue Length 50th (ft)		73						1			3	
Queue Length 95th (ft)		105						11			11	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1759						670			696	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.30						0.02			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 12.0		Intersection LOS: B	
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



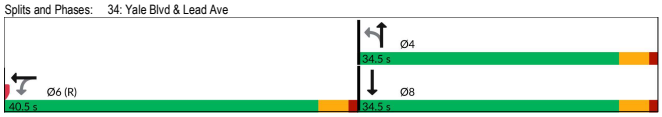
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	88	630	15	67	104	0	0	71	57
Future Volume (vph)	0	0	0	88	630	15	67	104	0	0	71	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.997							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3595	0	1805	1900	0	0	1881	1615
Flt Permitted				0.950			0.708					
Satd. Flow (perm)	0	0	0	1752	3595	0	1342	1900	0	0	1881	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4							87
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		6.5			9.0			20.3			28.0	
Confl. Peds. (#/hr)	4		4	14		14	2		2	1		1
Confl. Bikes (#/hr)			3			6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	94	670	16	71	111	0	0	76	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	94	686	0	71	111	0	0	76	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				CI+Ex	CI+Ex		CI+Ex	CI+Ex			CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					CI+Ex			CI+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				59.3	59.3		10.1	10.1			10.1	75.0
Actuated g/C Ratio				0.79	0.79		0.13	0.13			0.13	1.00
v/c Ratio				0.07	0.24		0.39	0.43			0.30	0.04
Control Delay (s/veh)				3.1	3.2		35.5	34.6			31.6	0.1
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				3.1	3.2		35.5	34.6			31.6	0.1
LOS				A	A		D	C			C	A
Approach Delay (s/veh)					3.2			35.0			17.6	
Approach LOS					A			C			B	
Queue Length 50th (ft)				9	38		31	49			33	0
Queue Length 95th (ft)				24	71		65	90			67	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1385	2842		536	760			752	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.07	0.24		0.13	0.15			0.10	0.04

Intersection Summary		
Area Type:	Other	
Cycle Length: 75		
Actuated Cycle Length: 75		
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.43		

Intersection Signal Delay (s/veh): 10.2	Intersection LOS: B
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 34: Yale Blvd & Lead Ave



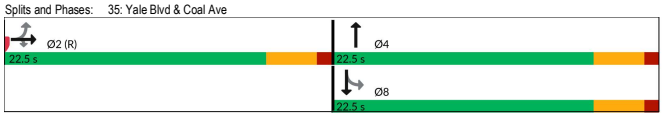
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Future Volume (vph)	26	313	71	0	0	0	0	155	136	14	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98							1.00		
Frt			0.850					0.937				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1780	0	1805	1900	0
Flt Permitted	0.950									0.438		
Satd. Flow (perm)	1805	3610	1577	0	0	0	0	1780	0	831	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76					117				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		16.0			10.6			12.4			20.3	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	333	76	0	0	0	0	165	145	15	157	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	333	76	0	0	0	0	310	0	15	157	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	25.0	25.0	25.0					11.0		11.0	11.0	
Actuated g/C Ratio	0.56	0.56	0.56					0.24		0.24	0.24	
v/c Ratio	0.03	0.17	0.08					0.59		0.07	0.34	
Control Delay (s/veh)	6.1	6.0	2.5					13.5		12.0	15.0	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	6.1	6.0	2.5					13.5		12.0	15.0	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		5.4						13.5			14.8	
Approach LOS		A						B			B	
Queue Length 50th (ft)	3	17	0					43		3	34	
Queue Length 95th (ft)	13	43	15					83		11	59	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	1002	2004	909					782		332	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.03	0.17	0.08					0.40		0.05	0.21	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 9.9	Intersection LOS: A
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

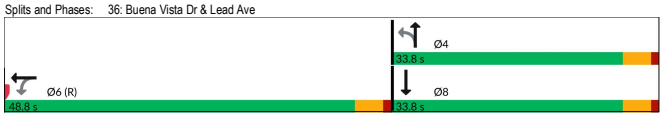


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Future Volume (vph)	0	0	0	16	799	4	30	4	0	0	6	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.999						0.910	
Flt Protected					0.999			0.957				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1818	0	0	1729	0
Flt Permitted					0.999			0.826				
Satd. Flow (perm)	0	0	0	0	3602	0	0	1569	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						12	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		27.2			9.8			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7			3			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	17	850	4	32	4	0	0	6	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	871	0	0	36	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.45			0.06			0.03	
Control Delay (s/veh)					12.6			18.1			11.3	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.6			18.1			11.3	
LOS					B			B			B	
Approach Delay (s/veh)					12.6			18.1			11.3	
Approach LOS					B			B			B	
Queue Length 50th (ft)					135			12			2	
Queue Length 95th (ft)					180			32			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1932			556			621	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.45			0.06			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

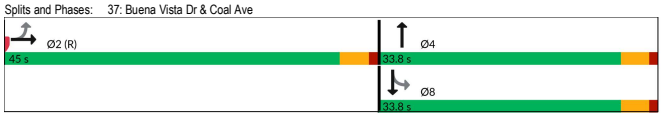


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Future Volume (vph)	23	445	52	0	0	0	0	20	6	9	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.985						0.970				
Flt Protected		0.998									0.984	
Satd. Flow (prot)	0	3536	0	0	0	0	0	1837	0	0	1870	0
Flt Permitted		0.998									0.878	
Satd. Flow (perm)	0	3533	0	0	0	0	0	1837	0	0	1665	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22						6				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		17.1			16.0			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	24	473	55	0	0	0	0	21	6	10	20	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	552	0	0	0	0	0	27	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		72.0						8.0			8.0	
Actuated g/C Ratio		0.91						0.10			0.10	
v/c Ratio		0.17						0.14			0.18	
Control Delay (s/veh)		1.2						29.1			35.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.2						29.1			35.2	
LOS		A						C			D	
Approach Delay (s/veh)		1.2						29.1			35.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						10			14	
Queue Length 95th (ft)		35						33			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		3230						686			619	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.17						0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 31.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Future Volume (vph)	0	0	0	50	679	106	32	203	0	0	256	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850					0.975	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3599	1615	1805	5187	0	0	5057	0
Flt Permitted					0.997		0.481					
Satd. Flow (perm)	0	0	0	0	3599	1589	914	5187	0	0	5057	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113					52	
Link Speed (mph)		25			25			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		58.3			27.2			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	53	722	113	34	216	0	0	272	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	775	113	34	216	0	0	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

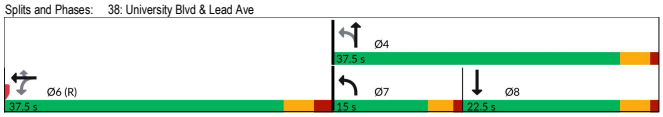
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6		6	4					
Detector Phase				6	6	6	7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0			8.0	
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (s)				37.5	37.5	37.5	15.0	37.5			22.5	
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%			30.0%	
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0			18.0	
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5			3.5	
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)					5.5	5.5	4.0	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	Max			Max	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				23.0	23.0	23.0		10.0			10.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)					32.0	32.0	33.5	33.0			29.1	
Actuated g/C Ratio					0.43	0.43	0.45	0.44			0.39	
v/c Ratio					0.50	0.15	0.07	0.09			0.16	
Control Delay (s/veh)					17.2	3.5	12.2	12.4			13.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)					17.2	3.5	12.2	12.4			13.8	
LOS					B	A	B	B			B	
Approach Delay (s/veh)					15.4			12.4			13.8	
Approach LOS					B			B			B	
Queue Length 50th (ft)					133	0	9	20			26	
Queue Length 95th (ft)					183	27	23	33			54	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1535	742	538	2282			1996	
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.50	0.15	0.06	0.09			0.16	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 41 (55%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 14.6	Intersection LOS: B
Intersection Capacity Utilization 59.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



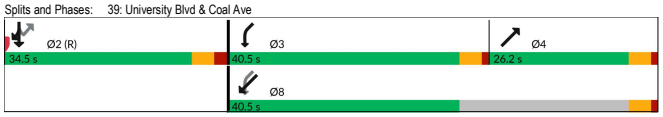
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Future Volume (vph)	0	0	0	39	431	102	0	203	68	50	245	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.564		
Satd. Flow (perm)	0	0	0	1802	3610	1615	0	5187	1586	1070	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109			124			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		4.5			14.5			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	41	459	109	0	216	72	53	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		3.0	8.0	
Minimum Split (s)				44.5	44.5	44.5		26.5		26.5	40.5	
Total Split (s)				34.5	34.5	34.5		26.2		40.5	40.5	
Total Split (%)				34.1%	34.1%	34.1%		25.9%		40.0%	40.0%	
Maximum Green (s)				29.0	29.0	29.0		21.7		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				2.0	2.0	2.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				5.5	5.5	5.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		1.5	2.0	
Recall Mode				C-Max	C-Max	C-Max		None		None	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		0.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		10.0		0.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				29.0	29.0	29.0		54.2	101.2	62.2	62.2	
Actuated g/C Ratio				0.29	0.29	0.29		0.54	1.00	0.61	0.61	
v/c Ratio				0.08	0.44	0.20		0.08	0.05	0.08	0.08	
Control Delay (s/veh)				27.0	31.2	6.4		12.1	0.1	8.1	8.0	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				27.0	31.2	6.4		12.1	0.1	8.1	8.0	
LOS				C	C	A		B	A	A	A	
Approach Delay (s/veh)					26.5			9.1			8.0	
Approach LOS					C			A			A	
Queue Length 50th (ft)				19	127	0		24	0	13	23	
Queue Length 95th (ft)				46	174	39		38	0	27	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				516	1034	540		2779	1586	919	3188	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.08	0.44	0.20		0.08	0.05	0.06	0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.44	

Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 39: University Blvd & Coal Ave

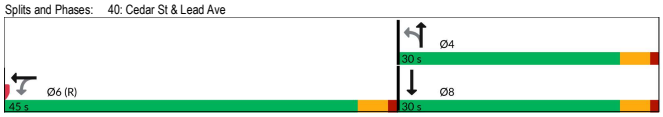


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Future Volume (vph)	0	0	0	17	780	39	9	168	0	0	14	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.993						0.880	
Flt Protected					0.999			0.997				
Satd. Flow (prot)	0	0	0	0	3577	0	0	1894	0	0	1650	0
Flt Permitted					0.999			0.981				
Satd. Flow (perm)	0	0	0	0	3576	0	0	1864	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					10						118	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		9.9			58.3			3.3			3.5	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	830	41	10	179	0	0	15	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	889	0	0	189	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.8			12.2			12.2	
Actuated g/C Ratio					0.72			0.16			0.16	
v/c Ratio					0.35			0.63			0.36	
Control Delay (s/veh)					1.2			38.1			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.2			38.1			9.9	
LOS					A			D			A	
Approach Delay (s/veh)					1.2			38.1			9.9	
Approach LOS					A			D			A	
Queue Length 50th (ft)					8			83			6	
Queue Length 95th (ft)					25			135			47	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2568			633			638	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.35			0.30			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 24 (32%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

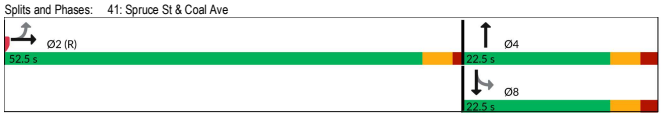


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Future Volume (vph)	26	623	3	0	0	0	0	3	2	5	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.946				
Flt Protected		0.998									0.980	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1787	0	0	1862	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	3598	0	0	0	0	0	1787	0	0	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						2				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		29.5			28.1			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	663	3	0	0	0	0	3	2	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	694	0	0	0	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.20						0.03			0.06	
Control Delay (s/veh)		0.9						26.2			31.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						26.2			31.0	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						26.2			31.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			5	
Queue Length 95th (ft)		52						11			20	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3425						406			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 1.6		Intersection LOS: A	
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Future Volume (vph)	0	0	0	0	434	489	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						122	105					
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		9.2			10.0			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	462	520	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					28.8	28.8	14.2	14.2				
Actuated g/C Ratio					0.55	0.55	0.27	0.27				
v/c Ratio					0.16	0.56	0.18	0.63				
Control Delay (s/veh)					6.6	9.4	4.1	19.1				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.6	9.4	4.1	19.1				
LOS					A	A	A	B				
Approach Delay (s/veh)					8.1			16.9				
Approach LOS					A			B				
Queue Length 50th (ft)					22	63	0	87				
Queue Length 95th (ft)					43	173	23	112				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2872	933	742	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.16	0.56	0.14	0.46				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay (s/veh): 11.9	Intersection LOS: B

Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave

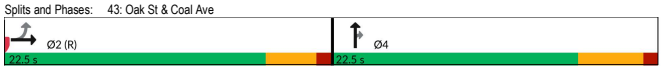
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Future Volume (vph)	407	856	0	0	0	0	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor									0.99			
Frt									0.850			
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	3610	1615	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	3610	1594	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	387								51			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		9.6			29.5			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	433	911	0	0	0	0	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	433	911	0	0	0	0	0	301	117	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	20	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	20	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	22.5	22.5						22.5	22.5			
Total Split (s)	22.5	22.5						22.5	22.5			
Total Split (%)	50.0%	50.0%						50.0%	50.0%			
Maximum Green (s)	18.0	18.0						17.0	17.0			
Yellow Time (s)	3.5	3.5						4.5	4.5			
All-Red Time (s)	1.0	1.0						1.0	1.0			
Lost Time Adjust (s)	0.0	0.0						0.0	0.0			
Total Lost Time (s)	4.5	4.5						5.5	5.5			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0	2.0			
Recall Mode	C-Max	C-Max						None	None			
Walk Time (s)	7.0	7.0						7.0	7.0			
Flash Don't Walk (s)	10.0	10.0						10.0	10.0			
Pedestrian Calls (#/hr)	0	0						0	0			
Act Effct Green (s)	24.7	24.7						10.3	10.3			
Actuated g/C Ratio	0.55	0.55						0.23	0.23			
v/c Ratio	0.37	0.46						0.37	0.29			
Control Delay (s/veh)	2.2	7.2						16.0	11.2			
Queue Delay	0.0	0.0						0.0	0.0			
Total Delay (s/veh)	2.2	7.2						16.0	11.2			
LOS	A	A						B	B			
Approach Delay (s/veh)		5.6						14.7				
Approach LOS		A						B				
Queue Length 50th (ft)	5	62						34	14			
Queue Length 95th (ft)	35	104						58	43			
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)									120			
Base Capacity (vph)	1165	1983						1363	633			
Starvation Cap Reductn	0	0						0	0			
Spillback Cap Reductn	0	0						0	0			
Storage Cap Reductn	0	0						0	0			
Reduced v/c Ratio	0.37	0.46						0.22	0.18			

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	

Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 43: Oak St & Coal Ave

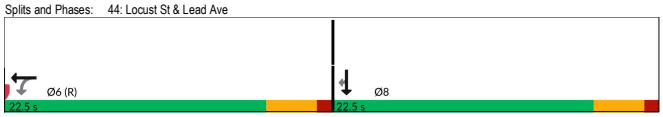


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Future Volume (vph)	0	0	0	70	440	0	0	0	0	0	541	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.972	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3361	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3361	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				74							68	237
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		29.7			9.2			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	74	468	0	0	0	0	0	576	441
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	0	0	74	468	0	0	0	0	0	708	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				20.2	20.2						15.8	15.8
Actuated g/C Ratio				0.45	0.45						0.35	0.35
v/c Ratio				0.09	0.29						0.58	0.46
Control Delay (s/veh)				3.2	9.2						12.3	5.5
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				3.2	9.2						12.3	5.5
LOS				A	A						B	A
Approach Delay (s/veh)					8.4						10.2	
Approach LOS					A						B	
Queue Length 50th (ft)				0	40						64	12
Queue Length 95th (ft)				17	67						102	53
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)				850	1619						1385	730
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.09	0.29						0.51	0.42

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 25 (56%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

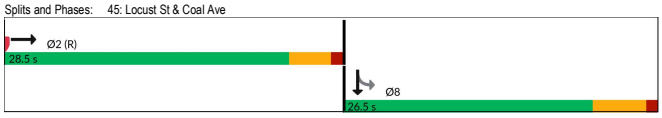


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Future Volume (vph)	0	711	59	0	0	0	0	0	0	556	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00								1.00	1.00	
Frt		0.988										
Flt Protected										0.950	0.963	
Satd. Flow (prot)	0	5110	0	0	0	0	0	0	0	1643	3330	0
Flt Permitted										0.950	0.963	
Satd. Flow (perm)	0	5110	0	0	0	0	0	0	0	1641	3328	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		31								110	110	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		9.8			9.6			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	756	63	0	0	0	0	0	0	591	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	295	390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										8		
Detector Phase		2								8	8	
Switch Phase												
Minimum Initial (s)		10.0								10.0	10.0	
Minimum Split (s)		28.5								26.5	26.5	
Total Split (s)		28.5								26.5	26.5	
Total Split (%)		51.8%								48.2%	48.2%	
Maximum Green (s)		24.0								21.0	21.0	
Yellow Time (s)		3.5								4.5	4.5	
All-Red Time (s)		1.0								1.0	1.0	
Lost Time Adjust (s)		0.0								0.0	0.0	
Total Lost Time (s)		4.5								5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0								2.0	2.0	
Recall Mode		C-Max								None	None	
Walk Time (s)		7.0								7.0	7.0	
Flash Don't Walk (s)		13.0								10.0	10.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		31.7								13.3	13.3	
Actuated g/C Ratio		0.58								0.24	0.24	
v/c Ratio		0.28								0.61	0.44	
Control Delay (s/veh)		6.6								16.5	13.3	
Queue Delay		0.0								0.0	0.0	
Total Delay (s/veh)		6.6								16.5	13.3	
LOS		A								B	B	
Approach Delay (s/veh)		6.6									14.6	
Approach LOS		A									B	
Queue Length 50th (ft)		37								59	43	
Queue Length 95th (ft)		78								107	62	
Internal Link Dist (ft)		280			272				72		117	
Turn Bay Length (ft)												
Base Capacity (vph)		2954								694	1338	
Starvation Cap Reductn		0								0	0	
Spillback Cap Reductn		0								0	0	
Storage Cap Reductn		0								0	0	
Reduced v/c Ratio		0.28								0.43	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 10.3		Intersection LOS: B	
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave

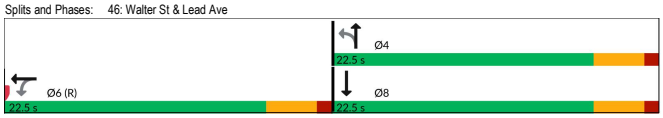


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Future Volume (vph)	0	0	0	21	876	6	13	5	0	0	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.923	
Flt Protected					0.999			0.964				
Satd. Flow (prot)	0	0	0	0	3602	0	0	1832	0	0	1740	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3602	0	0	1900	0	0	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2						4	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		30.2			29.7			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2				2		2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	22	932	6	14	5	0	0	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	960	0	0	19	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.29			0.06			0.02	
Control Delay (s/veh)					1.1			14.9			12.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.1			14.9			12.6	
LOS					A			B			B	
Approach Delay (s/veh)					1.1			14.9			12.6	
Approach LOS					A			B			B	
Queue Length 50th (ft)					0			4			1	
Queue Length 95th (ft)					38			18			8	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3330			760			698	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.03			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 44 (98%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 1.4		Intersection LOS: A	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Walter St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Future Volume (vph)	3	612	4	0	0	0	0	6	25	4	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.890				
Flt Protected											0.985	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1671	0	0	1872	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1671	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						27				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		30.1			19.5			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	651	4	0	0	0	0	6	27	4	9	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	0	0	0	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.20						0.10			0.04	
Control Delay (s/veh)		1.4						9.5			15.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						9.5			15.3	
LOS		A						A			B	
Approach Delay (s/veh)		1.4						9.5			15.3	
Approach LOS		A						A			B	
Queue Length 50th (ft)		0						1			3	
Queue Length 95th (ft)		50						18			m8	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						684			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 25 (56%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 2.0		Intersection LOS: A	
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Future Volume (vph)	0	0	0	40	723	121	2	65	494	0	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3574	1615	0	1805	3610	0	0	3574
Flt Permitted				0.950				0.480				
Satd. Flow (perm)	0	0	0	1801	3574	1583	0	912	3610	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						84						
Link Speed (mph)		25			25				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		14.9			30.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	0	0	43	769	129	2	69	526	0	0	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	43	769	129	0	71	526	0	0	350
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	79
Future Volume (vph)	79
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1588
Right Turn on Red	Yes
Satd. Flow (RTOR)	84
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	84
Shared Lane Traffic (%)	
Lane Group Flow (vph)	84
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (s)				38.5	38.5	38.5	31.9	31.9	39.6			39.6
Total Split (%)				35.0%	35.0%	35.0%	29.0%	29.0%	36.0%			36.0%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	35.1			35.1
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				58.5	58.5	58.5		39.2	35.1			35.1
Actuated g/C Ratio				0.53	0.53	0.53		0.36	0.32			0.32
v/c Ratio				0.04	0.40	0.15		0.20	0.46			0.31
Control Delay (s/veh)				13.5	16.6	6.0		4.9	8.1			29.2
Queue Delay				0.0	0.0	0.0		0.0	0.1			0.0
Total Delay (s/veh)				13.5	16.6	6.0		4.9	8.2			29.2
LOS				B	B	A		A	A			C
Approach Delay (s/veh)					15.0				7.8			24.8
Approach LOS					B				A			C
Queue Length 50th (ft)				15	168	15		6	33			97
Queue Length 95th (ft)				33	216	46		11	42			137
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				956	1899	880		740	1151			1140
Starvation Cap Reductn				0	0	0		0	109			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.04	0.40	0.15		0.10	0.50			0.31

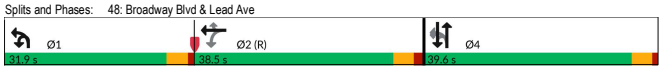
Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.15
Control Delay (s/veh)	6.5
Queue Delay	0.0
Total Delay (s/veh)	6.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	35
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	563
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 15.0 Intersection LOS: B
Intersection Capacity Utilization 60.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Future Volume (vph)	64	500	59	0	0	0	0	495	64	82	304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130	100		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.97						0.99			
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	1787	3610	0
Flt Permitted	0.950									0.359		
Satd. Flow (perm)	1790	3610	1573	0	0	0	0	3610	1595	675	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64						69			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		475			1105			421			359	
Travel Time (s)		13.0			30.1			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	532	63	0	0	0	0	527	68	87	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		2						4		1	4	
Permitted Phases	2		2						4	4		
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	42.9	
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	39.0%	
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	37.9	
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	7.0	
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9	61.4	37.9	
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34	0.56	0.34	
v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	
Control Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	10.9	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.1	32.4	7.3					29.0	6.3	2.9	10.9	
LOS	C	C	A					C	A	A	B	
Approach Delay (s/veh)		29.6						26.4			9.2	
Approach LOS		C						C			A	
Queue Length 50th (ft)	34	159	0					148	0	4	26	
Queue Length 95th (ft)	69	211	30					198	30	16	36	
Internal Link Dist (ft)		395			1025			341			279	
Turn Bay Length (ft)			200						130	100		
Base Capacity (vph)	554	1119	531					1243	594	609	1243	
Starvation Cap Reductn	0	0	0					0	0	0	0	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.12	0.48	0.12					0.42	0.11	0.14	0.26	

Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 103 (94%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 0.48
Intersection Signal Delay (s/veh): 23.4 Intersection LOS: C
Intersection Capacity Utilization 60.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	43	244
Future Volume (vph)	24	34	1	363	9	43	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.993
Satd. Flow (prot)	1715	0	0	1894	0	0	1887
Flt Permitted	0.979						0.993
Satd. Flow (perm)	1715	0	0	1894	0	0	1887
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	46	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	306
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 50.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	40	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.971			0.996			0.995	
Flt Protected		0.993			0.989			0.997			0.998	
Satd. Flow (prot)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.993			0.989			0.997			0.998	
Satd. Flow (perm)	0	1813	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	43	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	40	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.972			0.975			0.998			0.998	
Flt Protected		0.994			0.978		0.950			0.950		
Satd. Flow (prot)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.994			0.978		0.950			0.950		
Satd. Flow (perm)	0	1836	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2				2		2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	43	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.2%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	7	12	11	7	1
Future Volume (vph)	35	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.983	
Flt Protected	0.960			0.975		
Satd. Flow (prot)	1786	0	0	1852	1868	0
Flt Permitted	0.960			0.975		
Satd. Flow (perm)	1786	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	37	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

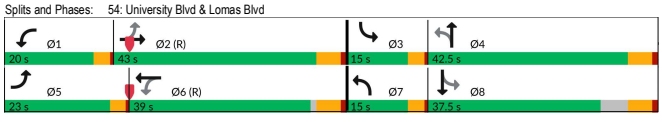
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.9%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

Intersection Summary

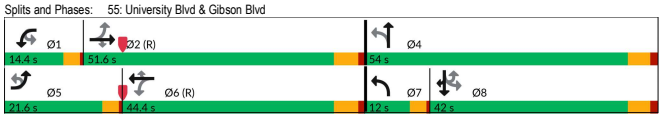
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay (s/veh): 20.3 Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	234	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	234	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.990			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3569	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3569	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	249	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	267	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.21		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	26.7		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	26.7		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.3			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	73		17	161			16
Queue Length 95th (ft)		#219	161	0	33	105		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1273		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.21		0.11	0.54			0.12

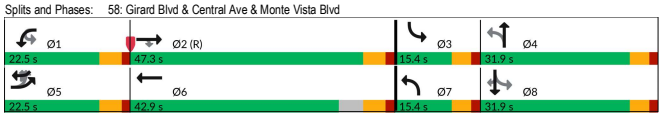
Intersection Summary
Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

Intersection Signal Delay (s/veh): 53.6 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	770	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		19.5			9.8			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 24.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	900	0	0	0
Future Volume (vph)	0	0	900	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		25	25		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		10.0	9.9		2.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	957	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	957	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.2% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

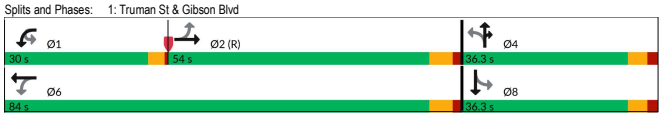
Intersection Summary	
Area Type:	Other
Cycle Length: 120.3	
Actuated Cycle Length: 120.3	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	

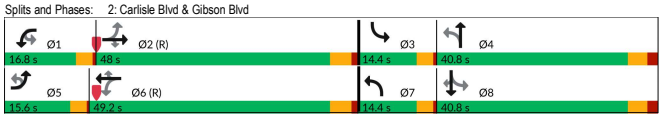
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary	

Intersection Signal Delay (s/veh): 5.5	Intersection LOS: A
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



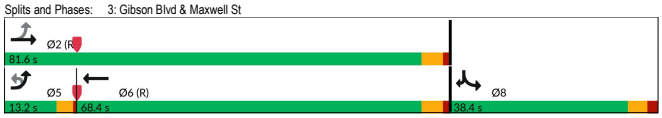
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	

Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

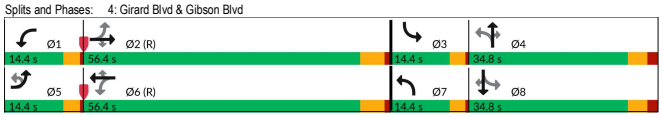
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary	

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary
Area Type: Other
Cycle Length: 123.3
Actuated Cycle Length: 123.3
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	

Intersection Summary

Intersection Signal Delay (s/veh): 17.4 Intersection LOS: B
Intersection Capacity Utilization 68.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

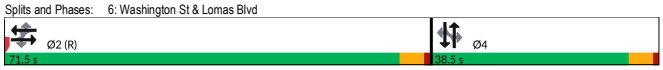
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

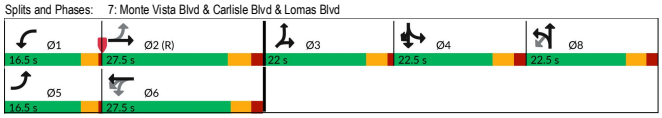
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary

Area Type: Other
Cycle Length: 111
Actuated Cycle Length: 111
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay (s/veh): 40.3 Intersection LOS: D
Intersection Capacity Utilization 88.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

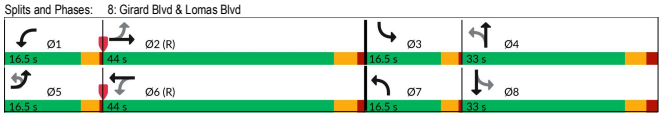
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay (s/veh): 22.3 Intersection LOS: C
Intersection Capacity Utilization 67.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

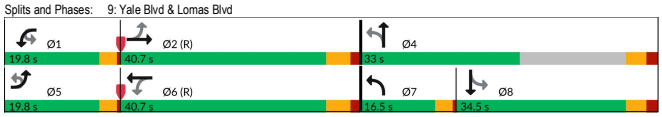
Intersection Summary
Area Type: Other
Cycle Length: 111.5
Actuated Cycle Length: 111.5
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09

Intersection Summary

Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Yale Blvd & Lomas Blvd



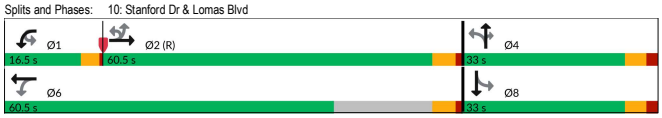
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	67	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	67	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.374			0.357
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	707	1851	0	669
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			699		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	68	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	68	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.9			15.9	75.5		18.2	18.2		18.2
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.36		0.65	0.71		0.22
Control Delay (s/veh)		77.1	15.1			79.8	15.1		74.2	60.0		48.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.1			79.8	15.1		74.2	60.0		48.2
LOS		E	B			E	B		E	E		D
Approach Delay (s/veh)			20.3				20.6			63.6		
Approach LOS			C				C			E		
Queue Length 50th (ft)		27	146			30	160		51	145		15
Queue Length 95th (ft)		61	281			66	309		98	214		40
Internal Link Dist (ft)			1288				848			619		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1165			78	1176		240	635		227
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.36		0.28	0.32		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 121			
Actuated Cycle Length: 121			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 34.7		Intersection LOS: C	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.2	
Actuated g/C Ratio	0.15	
v/c Ratio	0.69	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	57.4	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	207	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	480	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	480	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.998			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1896	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	701	1888	0	0	1347	1896	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	490	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	495	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

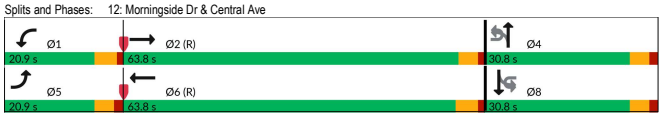
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.35			0.32		
Control Delay (s/veh)		57.4	5.8			49.1	9.3			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.4	5.8			49.1	9.3			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.5			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	144			22		
Queue Length 95th (ft)		52	191			32	283			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1418			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.35			0.11		

Intersection Summary

Area Type:	Other		
Cycle Length: 115.5			
Actuated Cycle Length: 115.5			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 13.9		Intersection LOS: B	
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	444	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	444	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.149				0.305			0.395			0.409
Satd. Flow (perm)	0	277	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	453	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	453	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.8	55.9	55.9		14.6	41.2	41.2	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.35	0.35	0.05		0.67	0.64	0.07	0.18	0.62		0.23
Control Delay (s/veh)		262.5	22.7	0.1		84.2	34.8	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		262.5	22.7	0.1		84.2	34.8	0.2	28.8	49.4		30.0
LOS		F	C	A		F	C	A	C	D		C
Approach Delay (s/veh)			66.6				36.3			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	273	0	22	122		31
Queue Length 95th (ft)		#203	278	0		#84	390	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		66	955	825		79	703	650	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.35	0.35	0.05		0.63	0.64	0.07	0.16	0.35		0.22

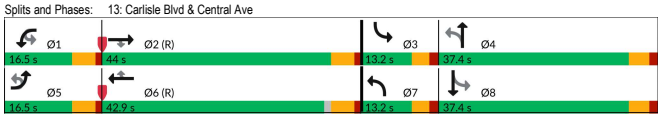
Intersection Summary			
Area Type:	Other		
Cycle Length: 111.1			
Actuated Cycle Length: 111.1			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay (s/veh): 48.6		Intersection LOS: D	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	509	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	509	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.994			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1876	0	0	1749	0	0
Flt Permitted		0.656				0.588				0.912		
Satd. Flow (perm)	0	1220	1877	0	0	1022	1876	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	519	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	539	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

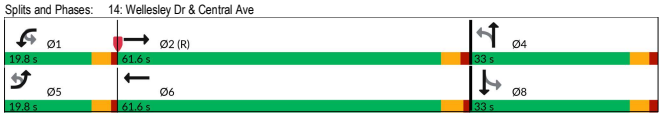
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.35			0.26		
Control Delay (s/veh)		53.5	3.8			49.5	6.2			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.5	3.8			49.5	6.2			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				8.0			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	63			16		
Queue Length 95th (ft)		41	96			39	270			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		167	1548			143	1558			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.35			0.09		

Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	
Intersection Summary		

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	448	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	448	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1876	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1177	1879	0	0	853	1876	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	457	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	464	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.31			0.41		
Control Delay (s/veh)		49.1	7.8			64.4	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.1	7.8			64.4	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				6.7			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			19	39			23		
Queue Length 95th (ft)		36	253			52	75			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1501			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.31			0.14		

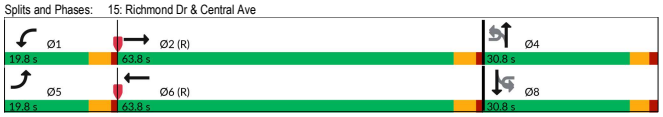
Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	

Intersection Summary

Intersection Signal Delay (s/veh): 11.4	Intersection LOS: B
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	613	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	613	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.995			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3581	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3581	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				3			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	626	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	646	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.31			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	15.1			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	15.1			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.8			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	124			16		
Queue Length 95th (ft)		#99	81			73	213			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2067			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.31			0.10		

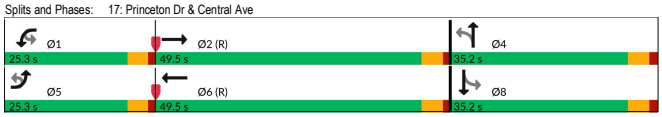
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	
Intersection Summary		

Intersection Signal Delay (s/veh): 20.1	Intersection LOS: C
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	611	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	611	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	623	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	628	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.22			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.3	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.3	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.4			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	33			10		5
Queue Length 95th (ft)		43	154			m68	45			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.22			0.08		0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

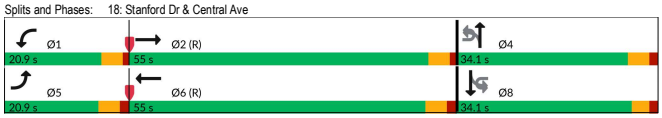
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary

Intersection Signal Delay (s/veh): 9.8	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	584	55	49
Future Volume (vph)	1	587	131	4	59	584	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	596	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	596	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

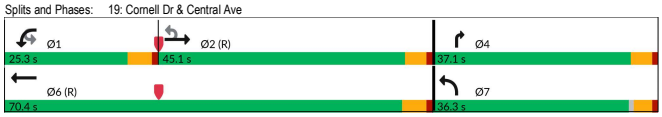
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.19	0.38	0.28
Control Delay (s/veh)		17.1			123.8	1.9	53.2	16.8
Queue Delay		0.0			0.0	0.3	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.2	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				14.0	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	30	37	0
Queue Length 95th (ft)		250			#113	51	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1839	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.47	0.10	0.10

Intersection Summary

Area Type: Other
Cycle Length: 107.5
Actuated Cycle Length: 107.5
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 17.1 Intersection LOS: B
Intersection Capacity Utilization 57.1% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	96	13	124	498	9	118	23	87	12
Future Volume (vph)	4	11	582	96	13	124	498	9	118	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.98				1.00		0.99		0.97	0.99
Frt			0.979				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3468	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.076			0.405			0.742
Satd. Flow (perm)	0	1466	3468	0	0	144	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			15				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1232		
Travel Time (s)			32.1				17.0			33.6		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	98	13	127	508	9	120	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	692	0	0	140	517	0	120	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			52.3	101.5		21.7	16.8	16.8	11.3
Actuated g/C Ratio		0.06	0.36			0.37	0.73		0.16	0.12	0.12	0.08
v/c Ratio		0.16	0.54			2.64	0.20		0.55	0.10	0.29	0.09
Control Delay (s/veh)		55.1	39.0			801.1	8.6		60.8	54.3	4.6	47.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.1	39.0			801.1	8.6		60.8	54.3	4.6	47.3
LOS		E	D			F	A		E	D	A	D
Approach Delay (s/veh)			39.4				177.5			38.6		
Approach LOS			D				F			D		
Queue Length 50th (ft)		12	216			~220	70		95	17	0	9
Queue Length 95th (ft)		m17	m303			#328	148		153	47	16	27
Internal Link Dist (ft)			1332				670			1152		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1272			53	2603		248	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.54			2.64	0.20		0.48	0.05	0.18	0.07

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.64

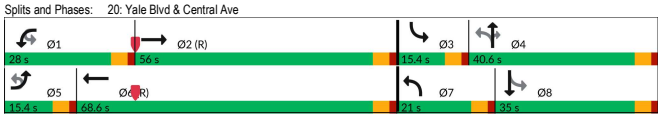
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.1	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	

Intersection Summary

Intersection Signal Delay (s/veh): 95.2		Intersection LOS: F	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Future Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.97	0.98			0.94	0.99	
Frt			0.993				0.946				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1885	0	0	1805	3358	0	0	1805	4971	0
Flt Permitted		0.116				0.108				0.503		
Satd. Flow (perm)	0	220	1885	0	0	200	3358	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				86				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	389	18	20	47	383	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	407	0	0	67	600	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	48.9			36.9	51.3			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.62			1.29	0.47			0.18	0.66	
Control Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.0				51.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	301			~80	205			23	104	
Queue Length 95th (ft)		#175	424			#190	126			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	660			52	1285			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.62			1.29	0.47			0.11	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	

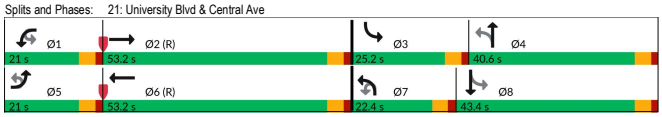
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 56.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Future Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.503				0.459			0.950			
Satd. Flow (perm)	0	956	1900	1563	0	872	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							712	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	388	171	11	70	432	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	388	171	0	81	432	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.40		0.05	
Control Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			6.7				5.7			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	105	0		12	76		67		0	
Queue Length 95th (ft)		3	162	23		23	171		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		858	1251	1088		761	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.21		0.05	

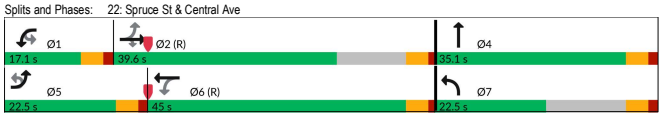
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 9.2	Intersection LOS: A
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	473	25	1	19	360	87	35	54	9	60
Future Volume (vph)	5	109	473	25	1	19	360	87	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300		300		120		0	120		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99	0.99		1.00	1.00		1.00
Frt				0.850			0.971			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3610	1615	0	1805	3486	0	1805	1856	0	1805
Flt Permitted		0.462				0.476			0.485			0.715
Satd. Flow (perm)	0	872	3610	1568	0	899	3486	0	920	1856	0	1358
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				76			38			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			351				320			291		
Travel Time (s)			8.0				7.3			6.6		
Confl. Peds. (#/hr)	3	3		3	3	3		3	3		3	1
Confl. Bikes (#/hr)				4				1			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	483	26	1	19	367	89	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	483	26	0	20	456	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1699	0
Flt Permitted		
Satd. Flow (perm)	1699	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	103	
Link Speed (mph)	30	
Link Distance (ft)	293	
Travel Time (s)	6.7	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	13.1%	39.4%		35.0%	35.0%		35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	7.7	29.3		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		3.5	4.5		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0			10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		65.8	61.6	61.6		62.6	56.9		10.3	10.3		10.3
Actuated g/C Ratio		0.77	0.72	0.72		0.73	0.66		0.12	0.12		0.12
v/c Ratio		0.16	0.19	0.02		0.03	0.20		0.33	0.28		0.37
Control Delay (s/veh)		3.2	5.2	0.0		3.1	6.2		41.5	32.4		40.4
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.2	5.2	0.0		3.1	6.2		41.5	32.4		40.4
LOS		A	A	A		A	A		D	C		D
Approach Delay (s/veh)			4.6				6.1			35.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		11	26	0		2	40		18	28		31
Queue Length 95th (ft)		29	82	0		8	78		45	60		65
Internal Link Dist (ft)			271				240			211		
Turn Bay Length (ft)		300		300		120			120			100
Base Capacity (vph)		876	2593	1147		752	2325		262	536		387
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.13	0.19	0.02		0.03	0.20		0.14	0.12		0.16

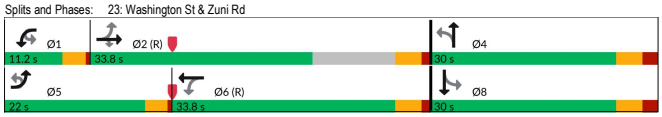
Intersection Summary	
Area Type:	Other
Cycle Length: 85.8	
Actuated Cycle Length: 85.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	35.0%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.59	
Control Delay (s/veh)	23.9	
Queue Delay	0.0	
Total Delay (s/veh)	23.9	
LOS	C	
Approach Delay (s/veh)	28.2	
Approach LOS	C	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	213	
Turn Bay Length (ft)		
Base Capacity (vph)	558	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary	

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

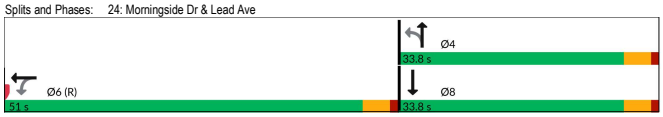


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	498	12	13	15	0	0	15	34
Future Volume (vph)	0	0	0	8	498	12	13	15	0	0	15	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.997						0.905	
Flt Protected					0.999			0.977				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1856	0	0	1695	0
Flt Permitted					0.999			0.915				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1738	0	0	1695	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						35	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		95			176			60			347	
Travel Time (s)		2.6			4.8			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	508	12	13	15	0	0	15	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	528	0	0	28	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.27			0.05			0.08	
Control Delay (s/veh)					10.5			18.9			9.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.5			18.9			9.6	
LOS					B			B			A	
Approach Delay (s/veh)					10.5			18.9			9.6	
Approach LOS					B			B			A	
Queue Length 50th (ft)					72			10			5	
Queue Length 95th (ft)					101			28			28	
Internal Link Dist (ft)		15			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1972			600			608	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.27			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



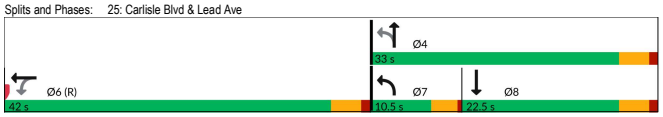
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	51	482	40	65	173	0	0	150	55
Future Volume (vph)	0	0	0	51	482	40	65	173	0	0	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor											1.00	
Frt					0.989						0.964	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	3556	0	1805	1900	0	0	1824	0
Flt Permitted					0.996		0.340					
Satd. Flow (perm)	0	0	0	0	3556	0	646	1900	0	0	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15						23	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		30.8			27.8			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	52	492	41	66	177	0	0	153	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	585	0	66	177	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					45.8		21.2	20.2			12.3	
Actuated g/C Ratio					0.61		0.28	0.27			0.16	
v/c Ratio					0.27		0.24	0.35			0.66	
Control Delay (s/veh)					8.2		7.1	9.2			35.7	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					8.2		7.1	9.2			35.7	
LOS					A		A	A			D	
Approach Delay (s/veh)					8.2			8.6			35.7	
Approach LOS					A			A			D	
Queue Length 50th (ft)					62		5	14			82	
Queue Length 95th (ft)					108		9	19			138	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2176		290	722			455	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.27		0.23	0.25			0.46	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Intersection Signal Delay (s/veh): 13.8		Intersection LOS: B	
Intersection Capacity Utilization 47.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 25: Carlisle Blvd & Lead Ave



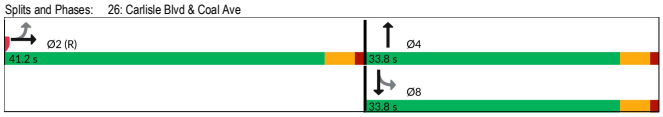
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Future Volume (vph)	44	476	74	0	0	0	0	192	46	25	176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.981						0.974				
Flt Protected		0.996								0.950		
Satd. Flow (prot)	0	3517	0	0	0	0	0	1846	0	1805	1900	0
Flt Permitted		0.996								0.383		
Satd. Flow (perm)	0	3517	0	0	0	0	0	1846	0	728	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29						19				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		41.0			37.3			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	45	486	76	0	0	0	0	196	47	26	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	607	0	0	0	0	0	243	0	26	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.3						13.7		13.7	13.7	
Actuated g/C Ratio		0.70						0.18		0.18	0.18	
v/c Ratio		0.25						0.69		0.20	0.52	
Control Delay (s/veh)		4.8						36.0		26.8	31.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		4.8						36.0		26.8	31.7	
LOS		A						D		C	C	
Approach Delay (s/veh)		4.8						36.0			31.1	
Approach LOS		A						D			C	
Queue Length 50th (ft)		42						98		12	88	
Queue Length 95th (ft)		81						155		m28	147	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2460						732		284	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.25						0.33		0.09	0.24	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 56 (75%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay (s/veh): 17.1 Intersection LOS: B

Intersection Capacity Utilization 47.6% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Future Volume (vph)	13	583	8	0	0	0	0	17	62	5	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.894				
Flt Protected		0.999									0.988	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1699	0	0	1877	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	3599	0	0	0	0	0	1699	0	0	1877	0
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1366			678			657			532	
Travel Time (s)		37.3			18.5			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	595	8	0	0	0	0	17	63	5	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	80	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

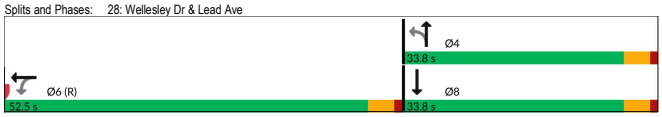
Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	590	16	16	9	0	0	10	27
Future Volume (vph)	0	0	0	8	590	16	16	9	0	0	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.996						0.901	
Flt Protected					0.999			0.969				
Satd. Flow (prot)	0	0	0	0	3590	0	0	1841	0	0	1712	0
Flt Permitted					0.999			0.885				
Satd. Flow (perm)	0	0	0	0	3589	0	0	1680	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						28	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		40.4			30.8			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	8	602	16	16	9	0	0	10	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	626	0	0	25	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	
v/c Ratio					0.31			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)					10.7			19.5			9.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					10.7			19.5			9.9	
LOS					B			B			A	
Approach Delay (s/veh)					10.7			19.5			9.9	
Approach LOS					B			B			A	
Queue Length 50th (ft)					88			9			4	
Queue Length 95th (ft)					121			26			24	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					1998			570			599	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.31			0.04			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 11.0		Intersection LOS: B	
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

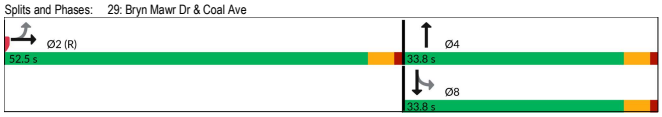


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Future Volume (vph)	15	598	3	0	0	0	0	1	6	3	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.884				
Flt Protected		0.999									0.982	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1646	0	0	1866	0
Flt Permitted		0.999									0.961	
Satd. Flow (perm)	0	3601	0	0	0	0	0	1646	0	0	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						6				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		30.5			41.0			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	610	3	0	0	0	0	1	6	3	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	628	0	0	0	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.31						0.01			0.01	
Control Delay (s/veh)		10.8						12.4			19.1	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		10.8						12.4			19.1	
LOS		B						B			B	
Approach Delay (s/veh)		10.8						12.4			19.1	
Approach LOS		B						B			B	
Queue Length 50th (ft)		89						0			3	
Queue Length 95th (ft)		122						9			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2003						562			619	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.31						0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B	
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



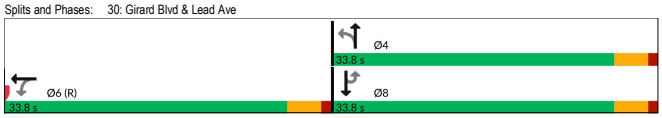
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	632	30	42	190	0	1	0	155
Future Volume (vph)	0	0	0	40	632	30	42	190	0	1	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt					0.994							0.952
Flt Protected					0.997			0.991				
Satd. Flow (prot)	0	0	0	0	3574	0	0	1883	0	0	0	1799
Flt Permitted					0.997			0.833				0.999
Satd. Flow (perm)	0	0	0	0	3574	0	0	1582	0	0	0	1797
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					8							52
Link Speed (mph)		25			25			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		30.9			40.4			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	41	645	31	43	194	0	1	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	717	0	0	237	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2		1	2		1		2
Detector Template				Left	Thru		Left	Thru		Left		Thru
Leading Detector (ft)				20	100		20	100		20		100
Trailing Detector (ft)				0	0		0	0		0		0
Detector 1 Position(ft)				0	0		0	0		0		0
Detector 1 Size(ft)				20	6		20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	88
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases				6			4			8		
Detector Phase				6	6		4	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0		8.0		8.0
Minimum Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (s)				33.8	33.8		33.8	33.8		33.8		33.8
Total Split (%)				50.0%	50.0%		50.0%	50.0%		50.0%		50.0%
Maximum Green (s)				29.3	29.3		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode				C-Max	C-Max		None	None		None		None
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					44.8			13.8				13.8
Actuated g/C Ratio					0.66			0.20				0.20
v/c Ratio					0.30			0.73				0.61
Control Delay (s/veh)					5.8			38.1				24.7
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					5.8			38.1				24.7
LOS					A			D				C
Approach Delay (s/veh)					5.8			38.1				24.7
Approach LOS					A			D				C
Queue Length 50th (ft)					54			93				73
Queue Length 95th (ft)					103			146				124
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)					2370			685				808
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.30			0.35				0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 16.1		Intersection LOS: B	
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

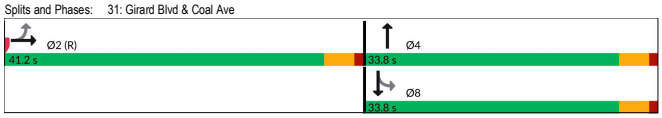
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Future Volume (vph)	78	542	49	0	0	0	0	156	30	39	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.989						0.978				
Flt Protected		0.994									0.990	
Satd. Flow (prot)	0	3542	0	0	0	0	0	1854	0	0	1881	0
Flt Permitted		0.994									0.823	
Satd. Flow (perm)	0	3541	0	0	0	0	0	1854	0	0	1563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15						15				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		40.9			30.5			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	80	553	50	0	0	0	0	159	31	40	163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	190	0	0	203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		52.7						13.3			13.3	
Actuated g/C Ratio		0.70						0.18			0.18	
v/c Ratio		0.27						0.56			0.73	
Control Delay (s/veh)		0.3						31.4			44.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.3						31.4			44.2	
LOS		A						C			D	
Approach Delay (s/veh)		0.3						31.4			44.2	
Approach LOS		A						C			D	
Queue Length 50th (ft)		0						75			90	
Queue Length 95th (ft)		0						124			145	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2492						733			610	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.27						0.26			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 48 (64%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 14.1		Intersection LOS: B	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



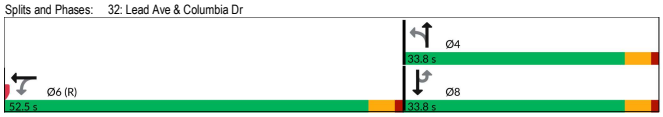
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	733	26	9	24	0	1	0	9
Future Volume (vph)	0	0	0	23	733	26	9	24	0	1	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								1.00				0.99
Frt					0.995							0.909
Flt Protected					0.999			0.987				0.998
Satd. Flow (prot)	0	0	0	0	3588	0	0	1875	0	0	0	1707
Flt Permitted					0.999			0.955				0.997
Satd. Flow (perm)	0	0	0	0	3588	0	0	1813	0	0	0	1705
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)					6							21
Link Speed (mph)		25			25			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		32.6			30.9			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	23	748	27	9	24	0	1	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	798	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type				Perm	NA		Perm	NA		Perm		NA
Protected Phases					6			4				8
Permitted Phases				6			4			8		
Minimum Split (s)				41.2	41.2		33.8	33.8		33.8		33.8
Total Split (s)				52.5	52.5		33.8	33.8		33.8		33.8
Total Split (%)				60.8%	60.8%		39.2%	39.2%		39.2%		39.2%
Maximum Green (s)				48.0	48.0		29.3	29.3		29.3		29.3
Yellow Time (s)				3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)				1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0		7.0		7.0
Flash Don't Walk (s)				10.0	10.0		10.0	10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0		0	0		0		0
Act Effct Green (s)					48.0			29.3				29.3
Actuated g/C Ratio					0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	21
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio					0.40			0.05				0.05
Control Delay (s/veh)					11.6			19.6				11.0
Queue Delay					0.0			0.0				0.0
Total Delay (s/veh)					11.6			19.6				11.0
LOS					B			B				B
Approach Delay (s/veh)					11.6			19.6				11.0
Approach LOS					B			B				B
Queue Length 50th (ft)					120			12				4
Queue Length 95th (ft)					159			32				22
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)					1998			615				592
Starvation Cap Reductn					0			0				0
Spillback Cap Reductn					0			0				0
Storage Cap Reductn					0			0				0
Reduced v/c Ratio					0.40			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Lead Ave & Columbia Dr



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

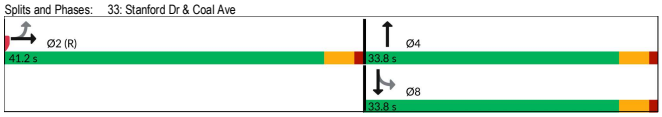
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Future Volume (vph)	18	656	6	0	0	0	0	4	1	11	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.999						0.973				
Flt Protected		0.999									0.967	
Satd. Flow (prot)	0	3531	0	0	0	0	0	1805	0	0	1801	0
Flt Permitted		0.999									0.908	
Satd. Flow (perm)	0	3531	0	0	0	0	0	1805	0	0	1685	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						1				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		20.6			40.9			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	18	669	6	0	0	0	0	4	1	11	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	693	0	0	0	0	0	5	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	
v/c Ratio		0.40						0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		13.0						13.2			14.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		13.0						13.2			14.3	
LOS		B						B			B	
Approach Delay (s/veh)		13.0						13.2			14.3	
Approach LOS		B						B			B	
Queue Length 50th (ft)		101						1			4	
Queue Length 95th (ft)		141						7			16	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1728						705			658	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.40						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 72 (96%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



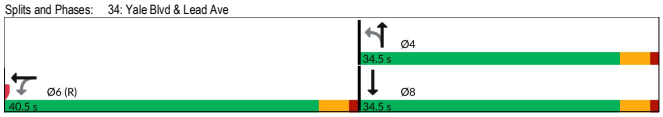
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	189	564	27	76	213	0	0	142	95
Future Volume (vph)	0	0	0	189	564	27	76	213	0	0	142	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.993							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3576	0	1805	1900	0	0	1900	1615
Flt Permitted				0.950			0.625					
Satd. Flow (perm)	0	0	0	1745	3576	0	1184	1900	0	0	1900	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9							87
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		6.5			9.0			20.3			28.0	
Confl. Peds. (#/hr)	7		7	16		16	3		3			
Confl. Bikes (#/hr)			3			2						1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	193	576	28	78	217	0	0	145	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	193	604	0	78	217	0	0	145	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				51.9	51.9		14.1	14.1			14.1	75.0
Actuated g/C Ratio				0.69	0.69		0.19	0.19			0.19	1.00
v/c Ratio				0.16	0.24		0.35	0.61			0.41	0.06
Control Delay (s/veh)				5.2	5.0		29.4	34.6			29.1	0.1
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				5.2	5.0		29.4	34.6			29.1	0.1
LOS				A	A		C	C			C	A
Approach Delay (s/veh)					5.1			33.2			17.4	
Approach LOS					A			C			B	
Queue Length 50th (ft)				26	44		32	94			60	0
Queue Length 95th (ft)				62	85		63	144			100	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1207	2477		473	760			760	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.16	0.24		0.16	0.29			0.19	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			

Intersection Signal Delay (s/veh): 13.5	Intersection LOS: B
Intersection Capacity Utilization 55.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: Yale Blvd & Lead Ave



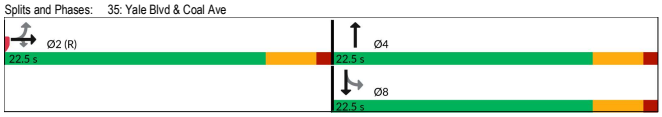
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	493	107	0	0	0	0	274	155	35	296	0
Future Volume (vph)	42	493	107	0	0	0	0	274	155	35	296	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97					0.99		1.00		
Frt			0.850					0.951				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1795	0	1805	1900	0
Flt Permitted	0.950									0.310		
Satd. Flow (perm)	1805	3610	1574	0	0	0	0	1795	0	587	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109					75				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		16.0			10.6			12.4			20.3	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	503	109	0	0	0	0	280	158	36	302	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	503	109	0	0	0	0	438	0	36	302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	22.0	22.0	22.0					14.0		14.0	14.0	
Actuated g/C Ratio	0.49	0.49	0.49					0.31		0.31	0.31	
v/c Ratio	0.05	0.29	0.13					0.72		0.20	0.51	
Control Delay (s/veh)	7.9	8.3	2.9					17.8		12.5	15.1	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	7.9	8.3	2.9					17.8		12.5	15.1	
LOS	A	A	A					B		B	B	
Approach Delay (s/veh)		7.4						17.8			14.8	
Approach LOS		A						B			B	
Queue Length 50th (ft)	5	37	0					77		7	61	
Queue Length 95th (ft)	20	72	20					134		20	100	
Internal Link Dist (ft)		507				310		465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	881	1763	824					763		234	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.05	0.29	0.13					0.57		0.15	0.40	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 35: Yale Blvd & Coal Ave

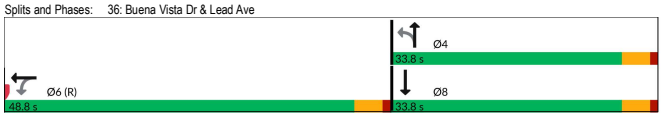


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Future Volume (vph)	0	0	0	19	744	11	57	11	0	0	7	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.928	
Flt Protected					0.999			0.960				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1824	0	0	1748	0
Flt Permitted					0.999			0.801				
Satd. Flow (perm)	0	0	0	0	3596	0	0	1518	0	0	1748	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						8	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		27.2			9.8			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	19	759	11	58	11	0	0	7	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	789	0	0	69	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.41			0.13			0.02	
Control Delay (s/veh)					12.1			18.9			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.1			18.9			12.7	
LOS					B			B			B	
Approach Delay (s/veh)					12.1			18.9			12.7	
Approach LOS					B			B			B	
Queue Length 50th (ft)					118			24			2	
Queue Length 95th (ft)					160			52			14	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1929			538			625	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.41			0.13			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 82.6			
Actuated Cycle Length: 82.6			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 46.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Buena Vista Dr & Lead Ave

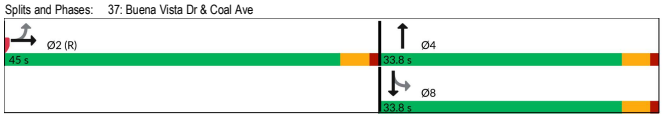


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Future Volume (vph)	29	619	47	0	0	0	0	40	30	8	23	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99						0.99			1.00	
Frt		0.990						0.942				
Flt Protected		0.998									0.987	
Satd. Flow (prot)	0	3554	0	0	0	0	0	1773	0	0	1875	0
Flt Permitted		0.998									0.897	
Satd. Flow (perm)	0	3548	0	0	0	0	0	1773	0	0	1698	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14						31				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		17.1			16.0			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	632	48	0	0	0	0	41	31	8	23	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	710	0	0	0	0	0	72	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.9						8.3			8.3	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.24						0.34			0.17	
Control Delay (s/veh)		2.3						25.7			34.3	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.3						25.7			34.3	
LOS		A						C			C	
Approach Delay (s/veh)		2.3						25.7			34.3	
Approach LOS		A						C			C	
Queue Length 50th (ft)		34						19			14	
Queue Length 95th (ft)		54						56			39	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2923						678			631	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.24						0.11			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 5.6		Intersection LOS: A	
Intersection Capacity Utilization 40.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Future Volume (vph)	0	0	0	83	634	97	59	278	0	2	0	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0		0	
Storage Lanes	0		0	0		1	1		0		0	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	0.91	1.00	0.91
Ped Bike Factor					1.00	0.98	1.00					1.00
Frt						0.850						0.979
Flt Protected					0.994		0.950					
Satd. Flow (prot)	0	0	0	0	3588	1615	1805	5187	0	0	0	5066
Flt Permitted					0.994		0.440					0.939
Satd. Flow (perm)	0	0	0	0	3586	1586	834	5187	0	0	0	4757
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)						99						38
Link Speed (mph)		25			25			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		58.3			27.2			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	85	647	99	60	284	0	2	0	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	732	99	60	284	0	0	0	405
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors				1	2	1	1	2		1		2
Detector Template				Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)				20	100	20	20	100		20		100
Trailing Detector (ft)				0	0	0	0	0		0		0
Detector 1 Position(ft)				0	0	0	0	0		0		0
Detector 1 Size(ft)				20	6	20	20	6		20		6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Perm	NA	Perm	pm+pt	NA		Perm		NA
Protected Phases					6		7	4				8
Permitted Phases				6		6	4			8		
Detector Phase				6	6	6	7	4		8		8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	8.0		8.0		8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (s)				37.5	37.5	37.5	15.0	37.5		22.5		22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	50.0%		30.0%		30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	33.0		18.0		18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.5		3.5		3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				0.0
Total Lost Time (s)					5.5	5.5	4.0	4.5				4.5
Lead/Lag							Lead			Lag		Lag
Lead-Lag Optimize?							Yes			Yes		Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	3.0		3.0		3.0
Recall Mode				C-Max	C-Max	C-Max	None	Max		Max		Max
Walk Time (s)				7.0	7.0	7.0		7.0		7.0		7.0
Flash Don't Walk (s)				23.0	23.0	23.0		10.0		10.0		10.0
Pedestrian Calls (#/hr)				0	0	0		0		0		0
Act Effct Green (s)					32.0	32.0	33.5	33.0				26.9
Actuated g/C Ratio					0.43	0.43	0.45	0.44				0.36
v/c Ratio					0.48	0.14	0.14	0.12				0.23
Control Delay (s/veh)					16.8	3.6	12.7	12.6				16.8
Queue Delay					0.0	0.0	0.0	0.0				0.0
Total Delay (s/veh)					16.8	3.6	12.7	12.6				16.8
LOS					B	A	B	B				B
Approach Delay (s/veh)					15.2			12.7				16.8
Approach LOS					B			B				B
Queue Length 50th (ft)					124	0	15	27				46
Queue Length 95th (ft)					171	25	35	42				71
Internal Link Dist (ft)		2058			918			690				1038
Turn Bay Length (ft)						130	125					
Base Capacity (vph)					1530	733	514	2282				1729
Starvation Cap Reductn					0	0	0	0				0
Spillback Cap Reductn					0	0	0	0				0
Storage Cap Reductn					0	0	0	0				0
Reduced v/c Ratio					0.48	0.14	0.12	0.12				0.23

Intersection Summary

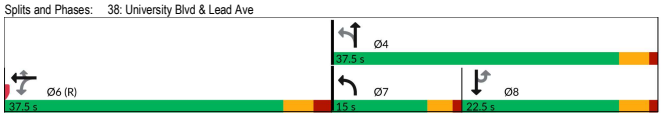
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 22 (29%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 15.1	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



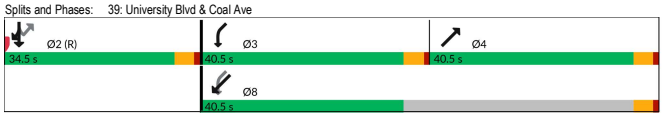
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Future Volume (vph)	0	0	0	25	488	77	0	285	104	94	316	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				0.99					0.97			
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.497		
Satd. Flow (perm)	0	0	0	1794	3610	1615	0	5187	1562	944	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						74			106			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		4.5			14.5			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	498	79	0	291	106	96	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.06	0.53	0.17		0.18	0.07	0.11	0.09	
Control Delay (s/veh)				32.7	39.2	9.5		29.4	0.1	7.3	7.1	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.7	39.2	9.5		29.4	0.1	7.3	7.1	
LOS				C	D	A		C	A	A	A	
Approach Delay (s/veh)					35.0			21.5			7.1	
Approach LOS					D			C			A	
Queue Length 50th (ft)				15	167	3		57	0	23	28	
Queue Length 95th (ft)				38	223	41		81	0	42	40	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				465	937	474		1616	1562	893	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.06	0.53	0.17		0.18	0.07	0.11	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Intersection Signal Delay (s/veh): 23.0	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

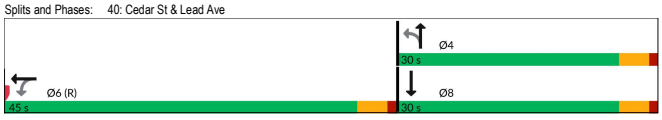


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Future Volume (vph)	0	0	0	29	770	20	16	38	0	0	17	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.996						0.888	
Flt Protected					0.998			0.986				
Satd. Flow (prot)	0	0	0	0	3586	0	0	1873	0	0	1687	0
Flt Permitted					0.998			0.866				
Satd. Flow (perm)	0	0	0	0	3586	0	0	1645	0	0	1687	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						83	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		9.9			58.3			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	30	786	20	16	39	0	0	17	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	836	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					61.1			8.3			8.3	
Actuated g/C Ratio					0.81			0.11			0.11	
v/c Ratio					0.29			0.30			0.38	
Control Delay (s/veh)					0.6			35.3			15.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					0.6			35.3			15.0	
LOS					A			D			B	
Approach Delay (s/veh)					0.6			35.3			15.0	
Approach LOS					A			D			B	
Queue Length 50th (ft)					7			24			7	
Queue Length 95th (ft)					12			56			49	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2922			559			628	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.29			0.10			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 20 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 4.0		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

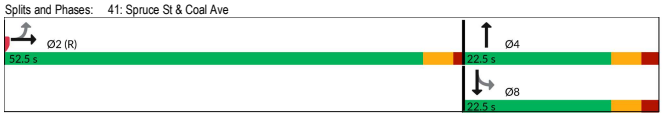


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Future Volume (vph)	16	596	7	0	0	0	0	7	7	8	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.998						0.932				
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1748	0	0	1858	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	3597	0	0	0	0	0	1748	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						7				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		29.5			28.1			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	608	7	0	0	0	0	7	7	8	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	631	0	0	0	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		71.4						8.0			8.0	
Actuated g/C Ratio		0.95						0.11			0.11	
v/c Ratio		0.18						0.07			0.09	
Control Delay (s/veh)		0.9						24.0			31.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.9						24.0			31.4	
LOS		A						C			C	
Approach Delay (s/veh)		0.9						24.0			31.4	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						3			8	
Queue Length 95th (ft)		46						19			26	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3424						401			430	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.18						0.03			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



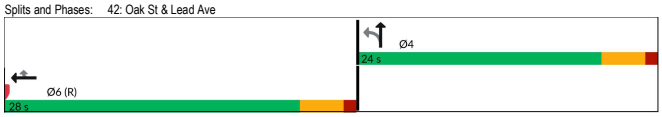
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Future Volume (vph)	0	0	0	0	412	454	71	482	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						196	72					
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		9.2			10.0			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	420	463	72	492	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					31.1	31.1	11.9	11.9				
Actuated g/C Ratio					0.60	0.60	0.23	0.23				
v/c Ratio					0.14	0.45	0.15	0.59				
Control Delay (s/veh)					5.3	5.5	5.2	20.4				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					5.3	5.5	5.2	20.4				
LOS					A	A	A	C				
Approach Delay (s/veh)					5.4			18.5				
Approach LOS					A			B				
Queue Length 50th (ft)					16	32	0	71				
Queue Length 95th (ft)					35	101	21	96				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					3098	1026	721	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.14	0.45	0.10	0.36				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay (s/veh): 10.5	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 42: Oak St & Lead Ave



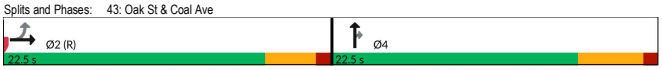
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Future Volume (vph)	315	660	0	0	0	0	0	231	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor									0.99			
Frt									0.850			
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	3610	1615	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	3610	1593	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	321								63			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		9.6			29.5			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	321	673	0	0	0	0	0	236	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	673	0	0	0	0	0	236	63	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	20	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	20	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	22.5	22.5						22.5	22.5			
Total Split (s)	22.5	22.5						22.5	22.5			
Total Split (%)	50.0%	50.0%						50.0%	50.0%			
Maximum Green (s)	18.0	18.0						17.0	17.0			
Yellow Time (s)	3.5	3.5						4.5	4.5			
All-Red Time (s)	1.0	1.0						1.0	1.0			
Lost Time Adjust (s)	0.0	0.0						0.0	0.0			
Total Lost Time (s)	4.5	4.5						5.5	5.5			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0	2.0			
Recall Mode	C-Max	C-Max						None	None			
Walk Time (s)	7.0	7.0						7.0	7.0			
Flash Don't Walk (s)	10.0	10.0						10.0	10.0			
Pedestrian Calls (#/hr)	0	0						0	0			
Act Effct Green (s)	29.0	29.0						10.0	10.0			
Actuated g/C Ratio	0.64	0.64						0.22	0.22			
v/c Ratio	0.25	0.29						0.29	0.16			
Control Delay (s/veh)	1.4	5.4						15.8	6.2			
Queue Delay	0.0	0.0						0.0	0.0			
Total Delay (s/veh)	1.4	5.4						15.8	6.2			
LOS	A	A						B	A			
Approach Delay (s/veh)		4.1						13.7				
Approach LOS		A						B				
Queue Length 50th (ft)	0	42						26	0			
Queue Length 95th (ft)	23	66						50	21			
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)									120			
Base Capacity (vph)	1277	2326						1363	641			
Starvation Cap Reductn	0	0						0	0			
Spillback Cap Reductn	0	0						0	0			
Storage Cap Reductn	0	0						0	0			
Reduced v/c Ratio	0.25	0.29						0.17	0.10			

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Intersection Signal Delay (s/veh): 6.3	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

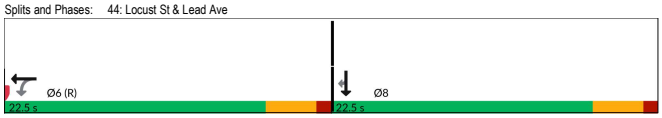


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Future Volume (vph)	0	0	0	90	454	0	0	0	0	0	385	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt											0.968	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1805	3610	0	0	0	0	0	3347	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1805	3610	0	0	0	0	0	3347	1470
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				92							86	220
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		29.7			9.2			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	92	463	0	0	0	0	0	393	328
Shared Lane Traffic (%)												33%
Lane Group Flow (vph)	0	0	0	92	463	0	0	0	0	0	501	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	
Permitted Phases				6								8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.7	22.7						13.3	13.3
Actuated g/C Ratio				0.50	0.50						0.30	0.30
v/c Ratio				0.10	0.25						0.48	0.37
Control Delay (s/veh)				2.8	7.7						11.6	3.9
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.8	7.7						11.6	3.9
LOS				A	A						B	A
Approach Delay (s/veh)					6.9						9.2	
Approach LOS					A						A	
Queue Length 50th (ft)				0	30						47	0
Queue Length 95th (ft)				18	67						65	31
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)				954	1817						1390	720
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.10	0.25						0.36	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 31 (69%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 8.2		Intersection LOS: A	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

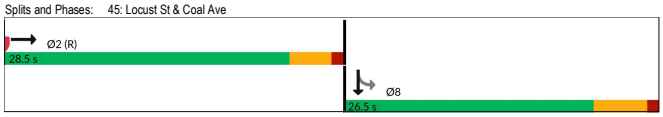


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Future Volume (vph)	0	583	66	0	0	0	0	0	0	392	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00										
Frt		0.985										
Flt Protected										0.950	0.967	
Satd. Flow (prot)	0	5102	0	0	0	0	0	0	0	1643	3344	0
Flt Permitted										0.950	0.967	
Satd. Flow (perm)	0	5102	0	0	0	0	0	0	0	1643	3344	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		44								180	180	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		9.8			9.6			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	595	67	0	0	0	0	0	0	400	91	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	200	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										8		
Detector Phase		2								8	8	
Switch Phase												
Minimum Initial (s)		10.0								10.0	10.0	
Minimum Split (s)		28.5								26.5	26.5	
Total Split (s)		28.5								26.5	26.5	
Total Split (%)		51.8%								48.2%	48.2%	
Maximum Green (s)		24.0								21.0	21.0	
Yellow Time (s)		3.5								4.5	4.5	
All-Red Time (s)		1.0								1.0	1.0	
Lost Time Adjust (s)		0.0								0.0	0.0	
Total Lost Time (s)		4.5								5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0								2.0	2.0	
Recall Mode		C-Max								None	None	
Walk Time (s)		7.0								7.0	7.0	
Flash Don't Walk (s)		13.0								10.0	10.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		34.5								10.5	10.5	
Actuated g/C Ratio		0.63								0.19	0.19	
v/c Ratio		0.21								0.44	0.37	
Control Delay (s/veh)		4.4								8.0	9.4	
Queue Delay		0.0								0.0	0.0	
Total Delay (s/veh)		4.4								8.0	9.4	
LOS		A								A	A	
Approach Delay (s/veh)		4.4									8.8	
Approach LOS		A									A	
Queue Length 50th (ft)		25								6	17	
Queue Length 95th (ft)		43								52	43	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)												
Base Capacity (vph)		3218								738	1388	
Starvation Cap Reductn		0								0	0	
Spillback Cap Reductn		0								0	0	
Storage Cap Reductn		0								0	0	
Reduced v/c Ratio		0.21								0.27	0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave

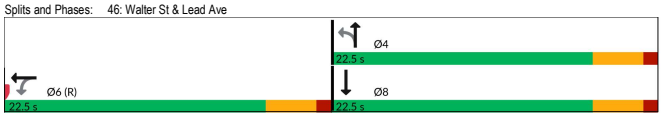


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Future Volume (vph)	0	0	0	16	637	29	4	7	0	0	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.994						0.932	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	3580	0	0	1866	0	0	1757	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3580	0	0	1900	0	0	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12						5	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		30.2			29.7			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	16	650	30	4	7	0	0	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	696	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.21			0.03			0.03	
Control Delay (s/veh)					0.8			11.5			12.8	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					0.8			11.5			12.8	
LOS					A			B			B	
Approach Delay (s/veh)					0.8			11.5			12.8	
Approach LOS					A			B			B	
Queue Length 50th (ft)					0			2			1	
Queue Length 95th (ft)					22			8			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3310			760			705	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.21			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 25 (56%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay (s/veh): 1.1		Intersection LOS: A	
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Walter St & Lead Ave

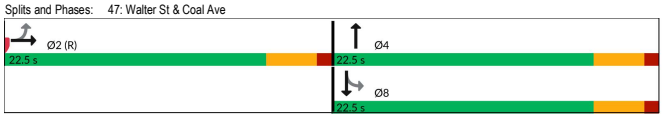


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Future Volume (vph)	5	596	3	0	0	0	0	8	23	7	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.900				
Flt Protected											0.983	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1693	0	0	1868	0
Flt Permitted												
Satd. Flow (perm)	0	3606	0	0	0	0	0	1693	0	0	1899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						23				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		30.1			19.5			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	608	3	0	0	0	0	8	23	7	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		41.6						8.0			8.0	
Actuated g/C Ratio		0.92						0.18			0.18	
v/c Ratio		0.18						0.10			0.06	
Control Delay (s/veh)		1.4						10.1			16.9	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.4						10.1			16.9	
LOS		A						B			B	
Approach Delay (s/veh)		1.4						10.1			16.9	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			5	
Queue Length 95th (ft)		47						18			21	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3334						691			759	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.18						0.04			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 16 (36%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 34.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Future Volume (vph)	0	0	0	75	454	94	2	66	364	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor						0.99		1.00				
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1754	3574	0	0	3574
Flt Permitted				0.950				0.523				
Satd. Flow (perm)	0	0	0	1805	3610	1593	0	962	3574	0	0	3574
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						94						
Link Speed (mph)		25			25				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		14.9			30.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	0	0	0	77	463	96	2	67	371	0	0	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	77	463	96	0	69	371	0	0	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1589
Right Turn on Red	Yes
Satd. Flow (RTOR)	79
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	79
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				38.5	38.5	38.5	24.2	24.2	47.3			47.3
Total Split (s)				38.5	38.5	38.5	31.9	31.9	47.3			47.3
Total Split (%)				32.7%	32.7%	32.7%	27.1%	27.1%	40.2%			40.2%
Maximum Green (s)				33.5	33.5	33.5	27.4	27.4	42.8			42.8
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lead	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				33.5	33.5	33.5		71.1	66.2			66.2
Actuated g/C Ratio				0.28	0.28	0.28		0.60	0.56			0.56
v/c Ratio				0.15	0.45	0.18		0.11	0.18			0.18
Control Delay (s/veh)				32.5	36.3	7.5		8.8	13.4			13.4
Queue Delay				0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)				32.5	36.3	7.5		8.8	13.4			13.4
LOS				C	D	A		A	B			B
Approach Delay (s/veh)					31.5				12.7			11.5
Approach LOS					C				B			B
Queue Length 50th (ft)				44	151	1		18	71			68
Queue Length 95th (ft)				83	202	42		36	101			99
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				513	1027	520		794	2010			2010
Starvation Cap Reductn				0	0	0		0	0			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.15	0.45	0.18		0.09	0.18			0.18

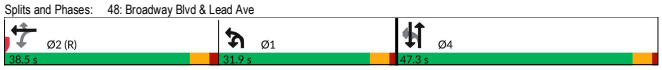
Intersection Summary	
Area Type:	Other
Cycle Length: 117.7	
Actuated Cycle Length: 117.7	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	66.2
Actuated g/C Ratio	0.56
v/c Ratio	0.09
Control Delay (s/veh)	3.1
Queue Delay	0.0
Total Delay (s/veh)	3.1
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	23
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	928
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.09

Intersection Summary

Intersection Signal Delay (s/veh): 20.2	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Future Volume (vph)	35	479	65	0	0	0	0	386	51	4	63	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.99		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3574	1615	0	1805	3610
Flt Permitted	0.950										0.459	
Satd. Flow (perm)	1798	3610	1589	0	0	0	0	3574	1594	0	871	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			66						69			
Link Speed (mph)		25			25			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		13.0			30.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	36	489	66	0	0	0	0	394	52	4	64	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	66	0	0	0	0	394	52	0	68	362
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6					42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1					37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lead	Lead	Lead							Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

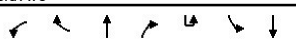
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	34.1	34.1	34.1					37.9	37.9		61.4	37.9
Actuated g/C Ratio	0.31	0.31	0.31					0.34	0.34		0.56	0.34
v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29
Control Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		9.7	27.1
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.3	31.8	7.4					27.5	4.1		9.7	27.1
LOS	C	C	A					C	A		A	C
Approach Delay (s/veh)		28.8						24.7				24.3
Approach LOS		C						C				C
Queue Length 50th (ft)	18	144	0					106	0		19	97
Queue Length 95th (ft)	42	194	31					147	18		37	136
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	557	1119	538					1231	594		681	1243
Starvation Cap Reductn	0	0	0					0	0		0	0
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.06	0.44	0.12					0.32	0.09		0.10	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 26.2		Intersection LOS: C	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Broadway Blvd & Coal Ave

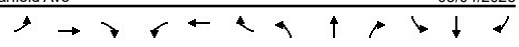
Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	



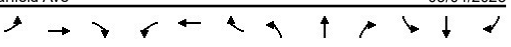
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	61	361
Future Volume (vph)	42	26	420	18	1	61	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.993
Satd. Flow (prot)	1713	0	1853	0	0	0	1850
Flt Permitted	0.970						0.993
Satd. Flow (perm)	1713	0	1853	0	0	0	1850
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	62	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	431
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	64	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.986			0.970			0.997			0.987	
Flt Protected		0.993			0.989			0.997			0.999	
Satd. Flow (prot)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.993			0.989			0.997			0.999	
Satd. Flow (perm)	0	1824	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	65	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	63	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.899			0.999			0.994	
Flt Protected		0.997			0.988		0.950			0.950		
Satd. Flow (prot)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.997			0.988		0.950			0.950		
Satd. Flow (perm)	0	1873	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	64	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	58	9	5	7	6	1
Future Volume (vph)	58	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.982				0.981	
Flt Protected	0.958			0.980		
Satd. Flow (prot)	1787	0	0	1862	1864	0
Flt Permitted	0.958			0.980		
Satd. Flow (perm)	1787	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	59	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.2%	ICU Level of Service A	
Analysis Period (min)	15		

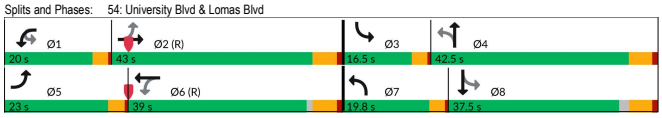
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99		0.98	1.00	1.00
Frt		0.981				0.968				0.850		0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11		11	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2			1	6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 122			
Actuated Cycle Length: 122			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

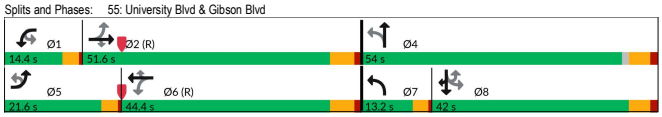
Intersection Summary	
Area Type:	Other
Cycle Length: 121.2	
Actuated Cycle Length: 121.2	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	449	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	449	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.994				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3584	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3584	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	458	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	478	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.37			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	28.7			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	28.7			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				31.0				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	139			30	161	
Queue Length 95th (ft)		#354	350	13		60	185			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1300			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.37			0.17	0.57	

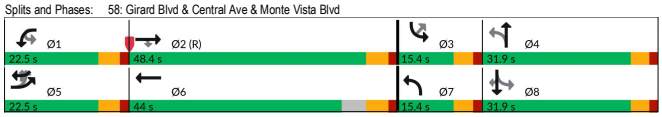
Intersection Summary
Area Type: Other
Cycle Length: 118.2
Actuated Cycle Length: 118.2
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.52

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 92.8 Intersection LOS: F
Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	649	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		19.5			9.8			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	662	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	867	0	0	0
Future Volume (vph)	0	0	867	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		25	25		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		10.0	9.9		2.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	885	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	885	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 147
Actuated Cycle Length: 147
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07

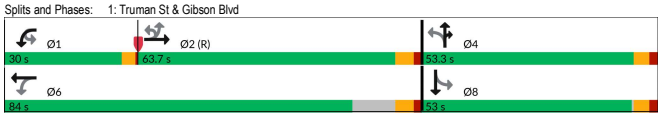
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary

Intersection Signal Delay (s/veh): 30.5		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

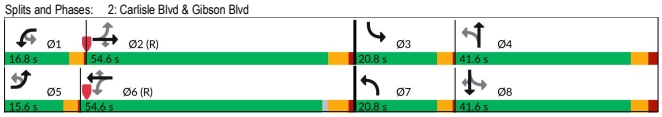
Intersection Summary	
Area Type:	Other
Cycle Length: 133.8	
Actuated Cycle Length: 133.8	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



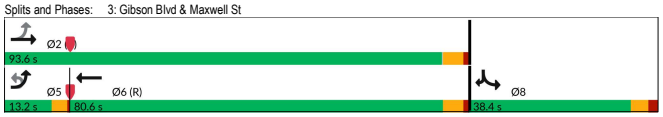
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 132.2	
Actuated Cycle Length: 132.2	
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.48	

Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

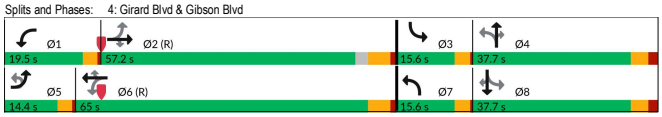
Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor						0.99		0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

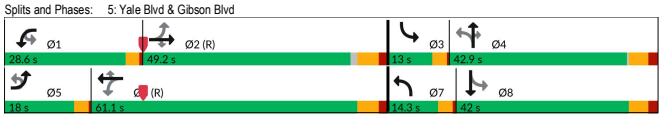
Intersection Summary
Area Type: Other
Cycle Length: 135.4
Actuated Cycle Length: 135.4
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 21.0 Intersection LOS: C

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization	76.6%
Analysis Period (min)	15
ICU Level of Service	D

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

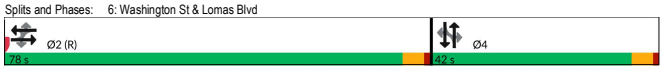
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 19.1	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

Intersection Summary

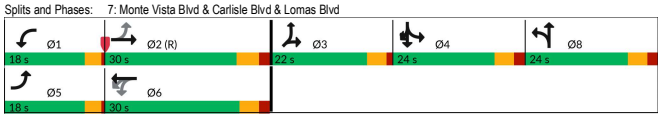
Area Type: Other
Cycle Length: 118
Actuated Cycle Length: 118
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay (s/veh): 84.6 Intersection LOS: F
Intersection Capacity Utilization 100.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



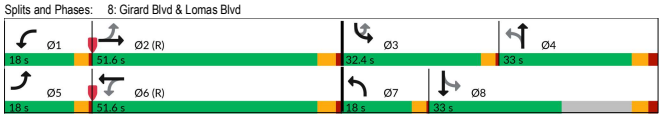
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary
Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 30.3 Intersection LOS: C
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

Intersection Summary

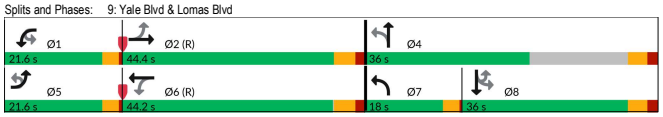
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

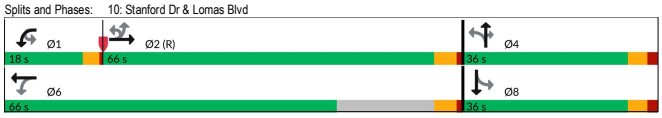
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	86	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	86	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.242				0.182			0.245			0.320
Satd. Flow (perm)	0	446	1881	0	0	346	1883	0	463	1869	0	603
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			699		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	90	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	90	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

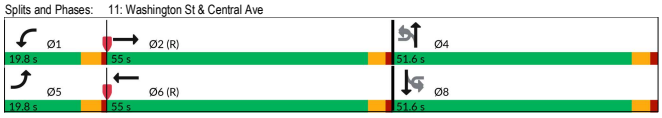
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		18.1	64.7			22.0	71.2		25.2	25.2		25.2
Actuated g/C Ratio		0.14	0.51			0.17	0.56		0.20	0.20		0.20
v/c Ratio		0.68	0.42			0.90	0.41		0.98	0.68		0.08
Control Delay (s/veh)		95.8	23.2			142.7	20.9		137.8	54.8		39.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	23.2			142.7	20.9		137.8	54.8		39.0
LOS		F	C			F	C		F	D		D
Approach Delay (s/veh)			30.3				34.2			76.4		
Approach LOS			C				C			E		
Queue Length 50th (ft)		34	201			43	209		74	193		6
Queue Length 95th (ft)		74	347			#117	380		#161	263		20
Internal Link Dist (ft)			1288				848			619		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		68	963			61	1061		170	691		222
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.63	0.42			0.89	0.41		0.53	0.37		0.04

Intersection Summary

Area Type: Other
Cycle Length: 126.4
Actuated Cycle Length: 126.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay (s/veh): 47.2 Intersection LOS: D
Intersection Capacity Utilization 66.6% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	25.2	
Actuated g/C Ratio	0.20	
v/c Ratio	0.78	
Control Delay (s/veh)	60.6	
Queue Delay	0.0	
Total Delay (s/veh)	60.6	
LOS	E	
Approach Delay (s/veh)	60.0	
Approach LOS	E	
Queue Length 50th (ft)	223	
Queue Length 95th (ft)	301	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

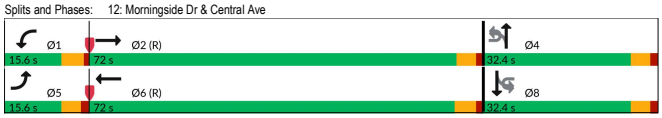
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	497	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	497	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	949	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	518	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	525	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.36			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	7.9			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	7.9			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.4			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	146			25		
Queue Length 95th (ft)		51	203			48	272			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.36			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 14.9		Intersection LOS: B	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	435	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	435	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	279	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	453	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	453	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.64	0.08	0.14	0.78		0.32
Control Delay (s/veh)		441.3	29.9	1.9		176.2	36.1	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		441.3	29.9	1.9		176.2	36.1	0.2	28.4	60.0		32.6
LOS		F	C	A		F	D	A	C	E		C
Approach Delay (s/veh)			107.2				48.7			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~130	221	0		50	288	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	405	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.64	0.08	0.13	0.57		0.31

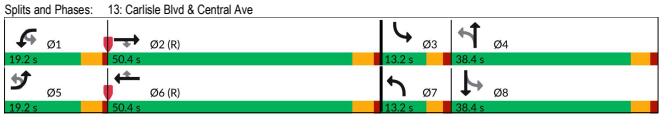
Intersection Summary
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.78
Intersection Signal Delay (s/veh): 67.5 Intersection LOS: E
Intersection Capacity Utilization 66.5% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	472	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	472	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00			1.00	1.00			0.94		
Frt			0.990				0.996			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1891	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	973	1872	0	0	1026	1891	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	492	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	507	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

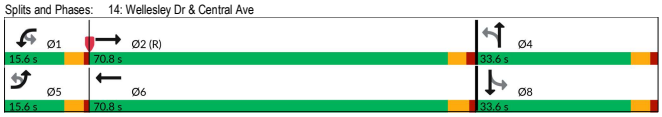
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.2			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.34			0.35		
Control Delay (s/veh)		64.7	4.3			58.7	6.9			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.7	4.3			58.7	6.9			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.3			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	126			19		
Queue Length 95th (ft)		50	98			46	242			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		99	1471			103	1485			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.34			0.12		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.2	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	469	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	469	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.997			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1893	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	968	1880	0	0	1051	1893	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	489	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	498	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.34			0.39		
Control Delay (s/veh)		60.3	7.3			69.9	3.9			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.3	7.3			69.9	3.9			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				7.0			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	64			32		
Queue Length 95th (ft)		49	259			51	86			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		97	1469			102	1471			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.34			0.15		

Intersection Summary

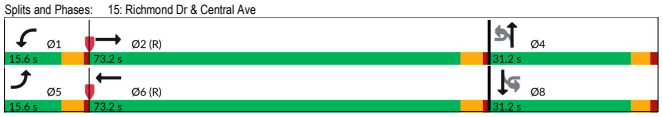
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary

Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	576	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	576	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.97	1.00			0.98		
Frt			0.993				0.989			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3553	0	0	1731	0	0
Flt Permitted		0.556				0.500				0.873		
Satd. Flow (perm)	0	1028	3574	0	0	925	3553	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				11			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	600	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	646	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.31	0.25			0.38	0.27			0.27		
Control Delay (s/veh)		37.0	8.9			38.7	8.4			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		37.0	8.9			38.7	8.4			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	74			14		
Queue Length 95th (ft)		43	137			51	142			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		144	2391			138	2416			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.26	0.25			0.34	0.27			0.10		

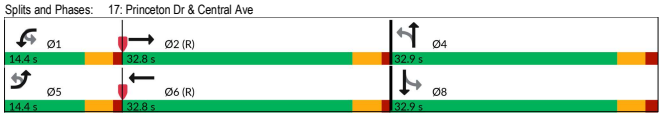
Intersection Summary	
Area Type:	Other
Cycle Length: 80.1	
Actuated Cycle Length: 80.1	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary	

Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	596	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	596	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				3			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	621	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	634	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

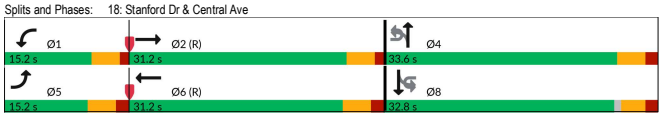
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.22			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.5			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.5			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	33			2		8	1
Queue Length 95th (ft)	36	103			30	98			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.22			0.04		0.03	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.22	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 6.7	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



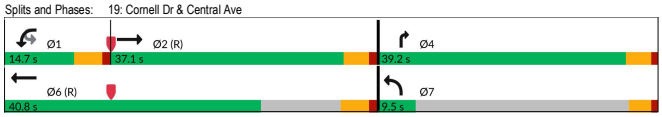
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	604	22	22
Future Volume (vph)	587	58	1	33	604	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	629	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	629	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.19	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.2	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.4	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	43	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	525	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.22	0.03	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 91	
Actuated Cycle Length: 91	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.31	

Intersection Signal Delay (s/veh): 5.0	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	155	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	155	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1232			105
Travel Time (s)		32.1				17.0			33.6			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	161	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	164	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			3.09	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			997.4	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			997.4	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				252.5			33.3			44.8
Approach LOS		D				F			C			D
Queue Length 50th (ft)	16	222			~217	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#386	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1152			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			3.09	0.19		0.37	0.05	0.20	0.09	0.15

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.09

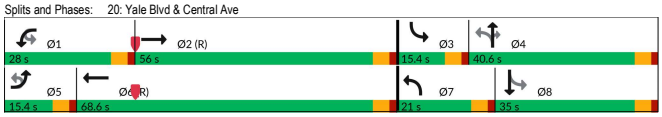
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 126.0	Intersection LOS: F
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Future Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.97		0.97	0.99		0.99
Frt			0.993				0.960			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	3372	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1881	0	0	151	3372	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				36			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	438	22	10	49	418	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	460	0	0	59	572	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.2			47.1	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.38			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.64			1.44	0.39		0.27	0.72		0.67
Control Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
LOS		F	D			F	C		D	E		E
Approach Delay (s/veh)			75.5				60.8			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	417			~90	210		42	159		168
Queue Length 95th (ft)		#197	553			#206	284		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	724			41	1480		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.64			1.44	0.39		0.18	0.39		0.49

Intersection Summary	
Area Type:	Other
Cycle Length: 172	
Actuated Cycle Length: 172	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	

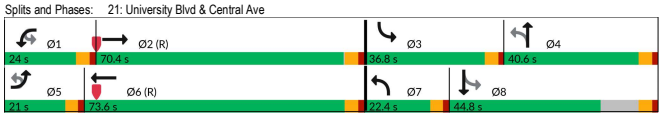
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary

Intersection Signal Delay (s/veh): 68.0	Intersection LOS: E
Intersection Capacity Utilization 73.0%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Future Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94		1.00			0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.437				0.452			0.950			
Satd. Flow (perm)	0	830	1900	1513	0	858	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							690	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	444	66	6	30	524	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	444	66	0	36	524	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.53		0.04	
Control Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			6.5				5.7			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	122	0		5	98		98		0	
Queue Length 95th (ft)		3	194	14		13	231		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		788	1389	1124		785	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.21		0.04	

Intersection Summary

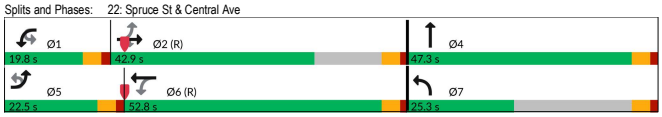
Area Type: Other
Cycle Length: 122.6
Actuated Cycle Length: 122.6
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 51.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 22: Spruce St & Central Ave



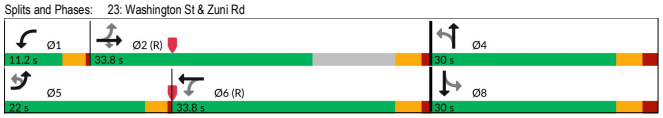
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	643	137	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	643	137	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97	1.00	0.99		1.00	1.00		1.00	0.99
Frt				0.850		0.974			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3499	0	1805	1834	0	1805	1730
Flt Permitted		0.287			0.425			0.456			0.704	
Satd. Flow (perm)	0	544	3610	1568	805	3499	0	865	1834	0	1337	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		32			16			69
Link Speed (mph)			30			30			30			30
Link Distance (ft)			405			419			441			345
Travel Time (s)			9.2			9.5			10.0			7.8
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	670	143	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	39.4%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	18.5	18.5	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0		0		0	0		0	0
Act Effct Green (s)		64.6	61.7	61.7	59.0	52.3		12.2	12.2		12.2	12.2
Actuated g/C Ratio		0.75	0.72	0.72	0.69	0.61		0.14	0.14		0.14	0.14
v/c Ratio		0.31	0.23	0.02	0.02	0.38		0.34	0.29		0.34	0.64
Control Delay (s/veh)		5.0	5.3	0.0	3.9	9.6		39.4	28.5		36.7	31.4
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.0	5.3	0.0	3.9	9.6		39.4	28.5		36.7	31.4
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			5.1			9.5			32.2			32.7
Approach LOS			A			A			C			C
Queue Length 50th (ft)		18	41	0	1	98		21	32		32	64
Queue Length 95th (ft)		46	112	0	7	175		49	67		65	123
Internal Link Dist (ft)			325			339			361			265
Turn Bay Length (ft)												
Base Capacity (vph)		681	2594	1148	662	2146		246	535		381	543
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.24	0.23	0.02	0.02	0.38		0.17	0.15		0.17	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 85.8			
Actuated Cycle Length: 85.8			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 23: Washington St & Zuni Rd



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

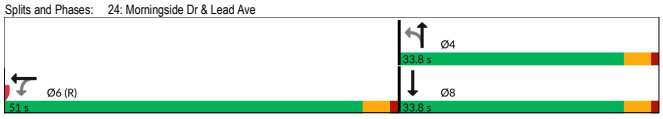
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	785	856	13	11	10	0	0	17	60
Future Volume (vph)	0	0	0	785	856	13	11	10	0	0	17	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.999						0.895	
Flt Protected					0.977			0.974				
Satd. Flow (prot)	0	0	0	0	3523	0	0	1851	0	0	1679	0
Flt Permitted					0.977			0.904				
Satd. Flow (perm)	0	0	0	0	3519	0	0	1718	0	0	1679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1						63	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		363			176			60			347	
Travel Time (s)		9.9			4.8			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	818	892	14	11	10	0	0	18	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1724	0	0	21	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				51.0	51.0		33.8	33.8			33.8	
Total Split (%)				60.1%	60.1%		39.9%	39.9%			39.9%	
Maximum Green (s)				46.5	46.5		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.5			29.3			29.3	
Actuated g/C Ratio					0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.89			0.04			0.13	
Control Delay (s/veh)					24.6			18.8			7.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					24.6			18.8			7.9	
LOS					C			B			A	
Approach Delay (s/veh)					24.6			18.8			7.9	
Approach LOS					C			B			A	
Queue Length 50th (ft)					398			7			6	
Queue Length 95th (ft)					#533			23			35	
Internal Link Dist (ft)		283			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)					1930			593			621	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.89			0.04			0.13	

Intersection Summary
Area Type: Other
Cycle Length: 84.8
Actuated Cycle Length: 84.8
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay (s/veh): 23.8 Intersection LOS: C
Intersection Capacity Utilization 68.6% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 24: Morningside Dr & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	753	44	156	278	0	0	185	53
Future Volume (vph)	0	0	0	57	753	44	156	278	0	0	185	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						1.00	
Frt					0.992						0.970	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3567	0	1805	1900	0	0	1838	0
Flt Permitted					0.997		0.291					
Satd. Flow (perm)	0	0	0	0	3567	0	553	1900	0	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					10						18	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		30.8			27.8			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	59	784	46	163	290	0	0	193	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	889	0	163	290	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

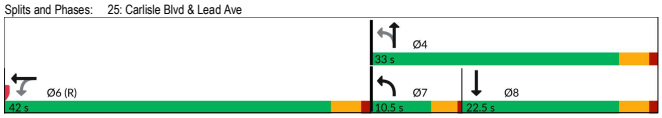
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					6		7	4			8	
Permitted Phases				6			4					
Detector Phase				6	6		7	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		3.0	8.0			8.0	
Minimum Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (s)				42.0	42.0		10.5	33.0			22.5	
Total Split (%)				56.0%	56.0%		14.0%	44.0%			30.0%	
Maximum Green (s)				37.5	37.5		7.0	28.5			18.0	
Yellow Time (s)				3.5	3.5		3.0	3.5			3.5	
All-Red Time (s)				1.0	1.0		0.5	1.0			1.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	
Total Lost Time (s)					4.5		3.5	4.5			4.5	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				2.0	2.0		1.5	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Don't Walk (s)				10.0	10.0			10.0			10.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					42.3		24.7	23.7			13.5	
Actuated g/C Ratio					0.56		0.33	0.32			0.18	
v/c Ratio					0.44		0.55	0.48			0.72	
Control Delay (s/veh)					11.0		14.9	13.1			38.4	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay (s/veh)					11.0		14.9	13.1			38.4	
LOS					B		B	B			D	
Approach Delay (s/veh)					11.0			13.8			38.4	
Approach LOS					B			B			D	
Queue Length 50th (ft)					116		42	110			101	
Queue Length 95th (ft)					182		m65	156			163	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)					2014		299	722			454	
Starvation Cap Reductn					0		0	0			0	
Spillback Cap Reductn					0		0	0			0	
Storage Cap Reductn					0		0	0			0	
Reduced v/c Ratio					0.44		0.55	0.40			0.55	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Future Volume (vph)	76	587	127	0	0	0	0	357	78	22	219	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.976						0.976				
Flt Protected		0.995								0.950		
Satd. Flow (prot)	0	3492	0	0	0	0	0	1850	0	1805	1900	0
Flt Permitted		0.995								0.204		
Satd. Flow (perm)	0	3492	0	0	0	0	0	1850	0	388	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41						17				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		41.0			37.3			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	79	611	132	0	0	0	0	372	81	23	228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	822	0	0	0	0	0	453	0	23	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						10		10	10	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												

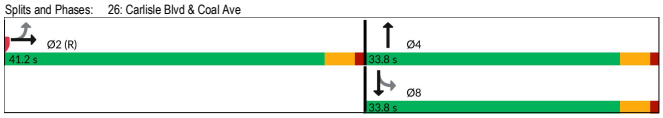
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.5						4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		43.7						22.3		22.3	22.3	
Actuated g/C Ratio		0.58						0.30		0.30	0.30	
v/c Ratio		0.40						0.81		0.20	0.40	
Control Delay (s/veh)		9.7						34.4		20.4	20.8	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay (s/veh)		9.7						34.4		20.4	20.8	
LOS		A						C		C	C	
Approach Delay (s/veh)		9.7						34.4			20.8	
Approach LOS		A						C			C	
Queue Length 50th (ft)		94						185		10	104	
Queue Length 95th (ft)		165						253		m18	157	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		2050						733		151	742	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.40						0.62		0.15	0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 49 (65%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 18.9	Intersection LOS: B
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Future Volume (vph)	13	665	8	0	0	0	0	7	91	11	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.874				
Flt Protected		0.999									0.974	
Satd. Flow (prot)	0	3599	0	0	0	0	0	1661	0	0	1851	0
Flt Permitted		0.999									0.974	
Satd. Flow (perm)	0	3599	0	0	0	0	0	1661	0	0	1851	0
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1366			644			657			532	
Travel Time (s)		37.3			17.6			14.9			12.1	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	693	8	0	0	0	0	7	95	11	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	715	0	0	0	0	0	102	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

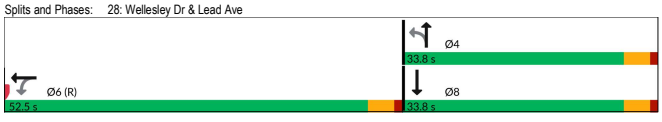
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.5%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	753	11	13	17	0	0	7	27
Future Volume (vph)	0	0	0	10	753	11	13	17	0	0	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.892	
Flt Protected					0.999			0.979				
Satd. Flow (prot)	0	0	0	0	3598	0	0	1860	0	0	1672	0
Flt Permitted					0.999			0.920				
Satd. Flow (perm)	0	0	0	0	3598	0	0	1746	0	0	1672	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						28	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		40.4			30.8			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	10	784	11	14	18	0	0	7	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	805	0	0	32	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.40			0.05			0.06	
Control Delay (s/veh)					11.7			19.6			9.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.7			19.6			9.4	
LOS					B			B			A	
Approach Delay (s/veh)					11.7			19.6			9.4	
Approach LOS					B			B			A	
Queue Length 50th (ft)					122			12			3	
Queue Length 95th (ft)					161			31			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)					2002			592			586	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.40			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	
Intersection Capacity Utilization	43.1%	ICU Level of Service A	
Analysis Period (min)	15		

Splits and Phases: 28: Wellesley Dr & Lead Ave

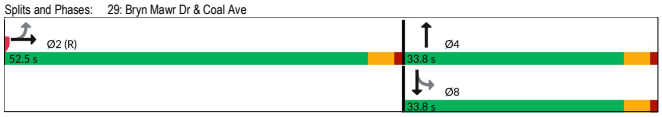


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Future Volume (vph)	11	784	10	0	0	0	0	5	0	5	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00									1.00	
Frt		0.998										
Flt Protected		0.999									0.978	
Satd. Flow (prot)	0	3598	0	0	0	0	0	1900	0	0	1858	0
Flt Permitted		0.999									0.947	
Satd. Flow (perm)	0	3598	0	0	0	0	0	1900	0	0	1794	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		30.5			41.0			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	817	10	0	0	0	0	5	0	5	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	838	0	0	0	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	52.5	52.5						33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%						39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		48.0						29.3			29.3	
Actuated g/C Ratio		0.56						0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.42						0.01			0.02	
Control Delay (s/veh)		11.9						19.0			19.2	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		11.9						19.0			19.2	
LOS		B						B			B	
Approach Delay (s/veh)		11.9						19.0			19.2	
Approach LOS		B						B			B	
Queue Length 50th (ft)		128						2			4	
Queue Length 95th (ft)		170						9			15	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		2002						645			609	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.42						0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 12.0		Intersection LOS: B	
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

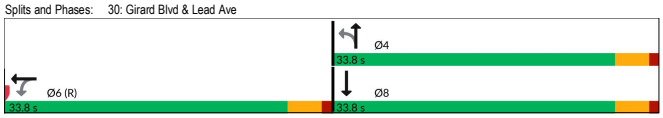


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	854	41	48	208	0	0	175	76
Future Volume (vph)	0	0	0	41	854	41	48	208	0	0	175	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			1.00	
Frt					0.993						0.959	
Flt Protected					0.998			0.991				
Satd. Flow (prot)	0	0	0	0	3574	0	0	1883	0	0	1814	0
Flt Permitted					0.998			0.755				
Satd. Flow (perm)	0	0	0	0	3574	0	0	1434	0	0	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9						41	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		30.9			40.4			15.2			31.2	
Confl. Peds. (#/hr)	1			1			1		1	1		1
Confl. Bikes (#/hr)				2		5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	43	890	43	50	217	0	0	182	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	976	0	0	267	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (s)				33.8	33.8		33.8	33.8			33.8	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				29.3	29.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					43.5			15.1			15.1	
Actuated g/C Ratio					0.64			0.22			0.22	
v/c Ratio					0.42			0.83			0.60	
Control Delay (s/veh)					7.3			46.1			24.6	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					7.3			46.1			24.6	
LOS					A			D			C	
Approach Delay (s/veh)					7.3			46.1			24.6	
Approach LOS					A			D			C	
Queue Length 50th (ft)					87			106			81	
Queue Length 95th (ft)					162			164			131	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)					2302			621			809	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.42			0.43			0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 0 (0%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

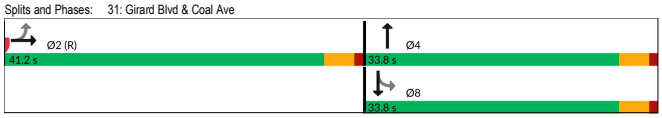


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Future Volume (vph)	81	770	55	0	0	0	0	175	44	44	170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.991						0.973				
Flt Protected		0.996									0.990	
Satd. Flow (prot)	0	3558	0	0	0	0	0	1844	0	0	1881	0
Flt Permitted		0.996									0.724	
Satd. Flow (perm)	0	3557	0	0	0	0	0	1844	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12						20				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		40.9			30.5			7.4			15.2	
Confl. Peds. (#/hr)	1		1						2			2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	802	57	0	0	0	0	182	46	46	177	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	943	0	0	0	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		51.7						14.3			14.3	
Actuated g/C Ratio		0.69						0.19			0.19	
v/c Ratio		0.38						0.62			0.85	
Control Delay (s/veh)		0.7						32.2			56.6	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		0.7						32.2			56.6	
LOS		A						C			E	
Approach Delay (s/veh)		0.7						32.2			56.6	
Approach LOS		A						C			E	
Queue Length 50th (ft)		4						89			101	
Queue Length 95th (ft)		6						142			162	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		2456						732			537	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.38						0.31			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 49 (65%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 14.8		Intersection LOS: B	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave

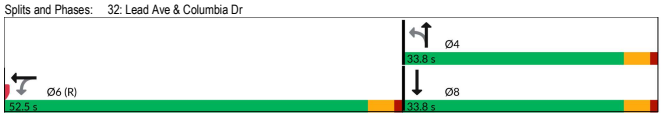


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	883	16	12	23	0	0	15	19
Future Volume (vph)	0	0	0	32	883	16	12	23	0	0	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.997						0.925	
Flt Protected					0.998			0.983				
Satd. Flow (prot)	0	0	0	0	3590	0	0	1868	0	0	1736	0
Flt Permitted					0.998			0.936				
Satd. Flow (perm)	0	0	0	0	3589	0	0	1777	0	0	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						20	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		32.6			30.9			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	920	17	13	24	0	0	16	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	970	0	0	37	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				52.5	52.5		33.8	33.8			33.8	
Total Split (%)				60.8%	60.8%		39.2%	39.2%			39.2%	
Maximum Green (s)				48.0	48.0		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					48.0			29.3			29.3	
Actuated g/C Ratio					0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.49			0.06			0.06	
Control Delay (s/veh)					12.6			19.7			12.0	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					12.6			19.7			12.0	
LOS					B			B			B	
Approach Delay (s/veh)					12.6			19.7			12.0	
Approach LOS					B			B			B	
Queue Length 50th (ft)					156			13			6	
Queue Length 95th (ft)					204			34			26	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)					1997			603			602	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.49			0.06			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 50.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Lead Ave & Columbia Dr

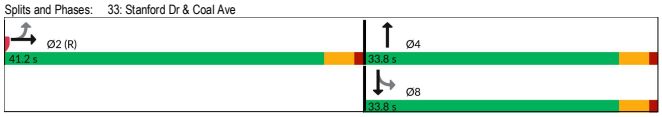


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Future Volume (vph)	24	837	6	0	0	0	0	6	7	13	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.999						0.927				
Flt Protected		0.999									0.966	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1744	0	0	1835	0
Flt Permitted		0.999									0.896	
Satd. Flow (perm)	0	3602	0	0	0	0	0	1744	0	0	1695	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		20.6			40.9			7.9			7.0	
Confl. Peds. (#/hr)	2		2			3			3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	872	6	0	0	0	0	6	7	14	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	0	0	0	0	0	13	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2									8		
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%						45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		36.7						29.3			29.3	
Actuated g/C Ratio		0.49						0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.51						0.02			0.03	
Control Delay (s/veh)		14.3						10.7			14.4	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		14.3						10.7			14.4	
LOS		B						B			B	
Approach Delay (s/veh)		14.3						10.7			14.4	
Approach LOS		B						B			B	
Queue Length 50th (ft)		142						2			6	
Queue Length 95th (ft)		191						12			18	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		1763						685			662	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.51						0.02			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



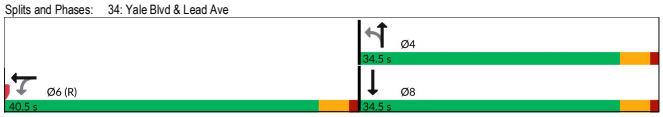
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	204	757	26	117	188	0	0	177	110
Future Volume (vph)	0	0	0	204	757	26	117	188	0	0	177	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97	1.00		1.00					0.99
Frt					0.995							0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1805	3586	0	1805	1900	0	0	1900	1615
Flt Permitted				0.950			0.524					
Satd. Flow (perm)	0	0	0	1756	3586	0	994	1900	0	0	1900	1595
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6							87
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		6.5			9.0			20.3			28.0	
Confl. Peds. (#/hr)	13		13	13		13	2		2	2		2
Confl. Bikes (#/hr)			1			7						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	213	789	27	122	196	0	0	184	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	213	816	0	122	196	0	0	184	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			0	0
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		20	100			0	0
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type				Perm	NA		Perm	NA			NA	Free
Protected Phases					6			4			8	
Permitted Phases				6			4					Free
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (s)				40.5	40.5		34.5	34.5			34.5	
Total Split (%)				54.0%	54.0%		46.0%	46.0%			46.0%	
Maximum Green (s)				36.0	36.0		30.0	30.0			30.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				11.0	11.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				52.4	52.4		13.6	13.6			13.6	75.0
Actuated g/C Ratio				0.70	0.70		0.18	0.18			0.18	1.00
v/c Ratio				0.17	0.33		0.68	0.57			0.53	0.07
Control Delay (s/veh)				5.1	5.4		46.4	33.7			32.6	0.1
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)				5.1	5.4		46.4	33.7			32.6	0.1
LOS				A	A		D	C			C	A
Approach Delay (s/veh)					5.3			38.6			20.1	
Approach LOS					A			D			C	
Queue Length 50th (ft)				27	61		54	85			79	0
Queue Length 95th (ft)				68	121		98	131			123	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)				1226	2506		397	760			760	1595
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.17	0.33		0.31	0.26			0.24	0.07

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68

Intersection Signal Delay (s/veh): 14.4 Intersection LOS: B
Intersection Capacity Utilization 65.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 34: Yale Blvd & Lead Ave



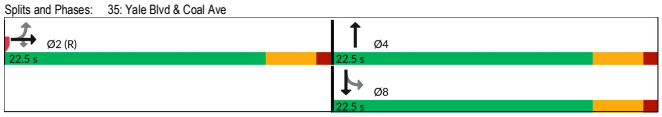
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	740	67	0	0	0	0	281	194	38	323	0
Future Volume (vph)	47	740	67	0	0	0	0	281	194	38	323	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97					0.99		1.00		
Frt			0.850					0.945				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	1785	0	1805	1900	0
Flt Permitted	0.950									0.268		
Satd. Flow (perm)	1798	3610	1572	0	0	0	0	1785	0	508	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70					82				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		16.0			10.6			12.4			20.3	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	771	70	0	0	0	0	293	202	40	336	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	771	70	0	0	0	0	495	0	40	336	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					0		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					0		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		2						4			8	
Permitted Phases	2		2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0					8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5					22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%	50.0%					50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0	18.0					18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5	3.5					3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5					4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0					10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)	21.1	21.1	21.1					14.9		14.9	14.9	
Actuated g/C Ratio	0.47	0.47	0.47					0.33		0.33	0.33	
v/c Ratio	0.06	0.46	0.09					0.77		0.24	0.53	
Control Delay (s/veh)	8.3	10.0	3.3					19.2		13.4	14.8	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay (s/veh)	8.3	10.0	3.3					19.2		13.4	14.8	
LOS	A	B	A					B		B	B	
Approach Delay (s/veh)		9.4						19.2			14.7	
Approach LOS		A						B			B	
Queue Length 50th (ft)	7	67	0					87		7	65	
Queue Length 95th (ft)	22	115	16					159		23	111	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130		130							90		
Base Capacity (vph)	842	1691	773					763		203	760	
Starvation Cap Reductn	0	0	0					0		0	0	
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.06	0.46	0.09					0.65		0.20	0.44	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

Intersection Signal Delay (s/veh): 13.3	Intersection LOS: B
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

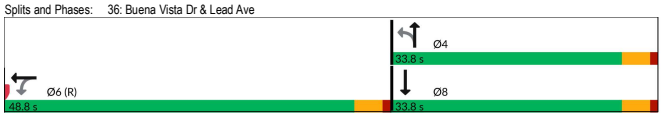


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Future Volume (vph)	0	0	0	17	867	17	78	22	0	0	8	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00						0.99	
Frt					0.997						0.922	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	3593	0	0	1830	0	0	1735	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	3592	0	0	1503	0	0	1735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						11	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		27.2			9.8			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	18	903	18	81	23	0	0	8	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	939	0	0	104	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	
Permitted Phases				6			4					
Minimum Split (s)				41.2	41.2		33.8	33.8			33.8	
Total Split (s)				48.8	48.8		33.8	33.8			33.8	
Total Split (%)				59.1%	59.1%		40.9%	40.9%			40.9%	
Maximum Green (s)				44.3	44.3		29.3	29.3			29.3	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					44.3			29.3			29.3	
Actuated g/C Ratio					0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio					0.49			0.20			0.03	
Control Delay (s/veh)					13.0			19.8			11.9	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					13.0			19.8			11.9	
LOS					B			B			B	
Approach Delay (s/veh)					13.0			19.8			11.9	
Approach LOS					B			B			B	
Queue Length 50th (ft)					149			37			3	
Queue Length 95th (ft)					197			73			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)					1928			533			622	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.49			0.20			0.03	

Intersection Summary	
Area Type:	Other
Cycle Length: 82.6	
Actuated Cycle Length: 82.6	
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay (s/veh): 13.7	Intersection LOS: B
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 36: Buena Vista Dr & Lead Ave

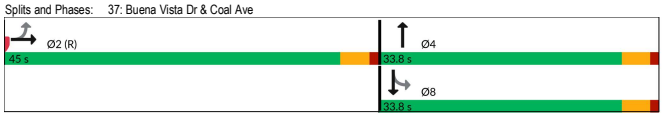


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Future Volume (vph)	35	850	43	0	0	0	0	62	34	17	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt		0.993						0.953				
Flt Protected		0.998									0.976	
Satd. Flow (prot)	0	3571	0	0	0	0	0	1799	0	0	1854	0
Flt Permitted		0.998									0.795	
Satd. Flow (perm)	0	3569	0	0	0	0	0	1799	0	0	1503	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9						35				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		17.1			16.0			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	885	45	0	0	0	0	65	35	18	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	966	0	0	0	0	0	100	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2						33.8		33.8	33.8	
Total Split (s)	45.0	45.0						33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%						42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5						29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		64.4						8.8			8.8	
Actuated g/C Ratio		0.82						0.11			0.11	
v/c Ratio		0.33						0.43			0.22	
Control Delay (s/veh)		2.9						28.2			34.7	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.9						28.2			34.7	
LOS		A						C			C	
Approach Delay (s/veh)		2.9						28.2			34.7	
Approach LOS		A						C			C	
Queue Length 50th (ft)		52						30			17	
Queue Length 95th (ft)		91						73			43	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		2917						690			558	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.33						0.14			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Future Volume (vph)	0	0	0	53	822	96	1	93	322	0	0	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	0.91	1.00	1.00	0.91
Ped Bike Factor					1.00	0.98						
Frt						0.850						0.972
Flt Protected					0.997			0.950				
Satd. Flow (prot)	0	0	0	0	3599	1615	0	1805	5187	0	0	5042
Flt Permitted					0.997			0.341				
Satd. Flow (perm)	0	0	0	0	3599	1589	0	648	5187	0	0	5042
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						100						66
Link Speed (mph)		25			25				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		58.3			27.2				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	55	856	100	1	97	335	0	0	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	911	100	0	98	335	0	0	558
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	2			2
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	20	100			100
Trailing Detector (ft)				0	0	0	0	0	0			0
Detector 1 Position(ft)				0	0	0	0	0	0			0
Detector 1 Size(ft)				20	6	20	20	20	6			6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94				94			94
Detector 2 Size(ft)					6				6			6
Detector 2 Type					Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	100
Future Volume (vph)	100
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	104
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0				0.0			0.0
Turn Type				Perm	NA	Perm	custom	pm+pt	NA			NA
Protected Phases					6			7	4			8
Permitted Phases				6		6	7	4				
Detector Phase				6	6	6	7	7	4			8
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (s)				37.5	37.5	37.5	15.0	15.0	37.5			22.5
Total Split (%)				50.0%	50.0%	50.0%	20.0%	20.0%	50.0%			30.0%
Maximum Green (s)				32.0	32.0	32.0	11.0	11.0	33.0			18.0
Yellow Time (s)				3.5	3.5	3.5	3.0	3.0	3.5			3.5
All-Red Time (s)				2.0	2.0	2.0	1.0	1.0	1.0			1.0
Lost Time Adjust (s)					0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)					5.5	5.5		4.0	4.5			4.5
Lead/Lag							Lead	Lead				Lag
Lead-Lag Optimize?							Yes	Yes				Yes
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0			7.0			7.0
Flash Don't Walk (s)				23.0	23.0	23.0			10.0			10.0
Pedestrian Calls (#/hr)				0	0	0			0			0
Act Effct Green (s)					32.0	32.0		33.5	33.0			24.3
Actuated g/C Ratio					0.43	0.43		0.45	0.44			0.32
v/c Ratio					0.59	0.14		0.25	0.15			0.33
Control Delay (s/veh)					18.5	3.6		14.0	12.8			18.4
Queue Delay					0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)					18.5	3.6		14.0	12.8			18.4
LOS					B	A		B	B			B
Approach Delay (s/veh)					17.0				13.1			18.4
Approach LOS					B				B			B
Queue Length 50th (ft)					164	0		26	32			64
Queue Length 95th (ft)					222	25		52	49			97
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125				
Base Capacity (vph)					1535	735		459	2282			1675
Starvation Cap Reductn					0	0		0	0			0
Spillback Cap Reductn					0	0		0	0			0
Storage Cap Reductn					0	0		0	0			0
Reduced v/c Ratio					0.59	0.14		0.21	0.15			0.33

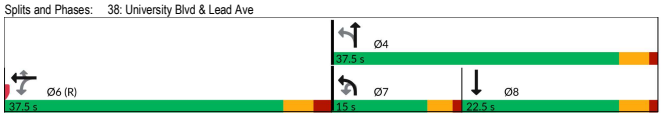
Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 47 (63%), Referenced to phase 2: and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.6		Intersection LOS: B	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 38: University Blvd & Lead Ave



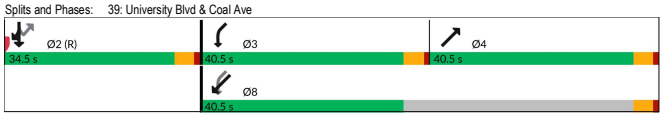
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Future Volume (vph)	0	0	0	32	730	76	0	324	114	119	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor				1.00					0.98	1.00		
Frt						0.850			0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	5187	1615	1805	5187	0
Flt Permitted				0.950						0.462		
Satd. Flow (perm)	0	0	0	1803	3610	1615	0	5187	1579	877	5187	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						57			119			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		4.5			14.5			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	760	79	0	338	119	124	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1		2	1	1	2	
Detector Template				Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (ft)				30	100	20		100	20	20	100	
Trailing Detector (ft)				4	0	0		0	0	0	0	
Detector 1 Position(ft)				4	0	0		0	0	0	0	
Detector 1 Size(ft)				26	6	20		6	20	20	6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Prot		NA	Free	pm+pt	NA	
Protected Phases					2	2		4		3	8	
Permitted Phases				2					Free	8		
Detector Phase				2	2	2		4		3	8	
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0		8.0		8.0	8.0	
Minimum Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (s)				34.5	34.5	34.5		40.5		40.5	40.5	
Total Split (%)				29.9%	29.9%	29.9%		35.1%		35.1%	35.1%	
Maximum Green (s)				30.0	30.0	30.0		36.0		36.0	36.0	
Yellow Time (s)				3.5	3.5	3.5		3.5		3.5	3.5	
All-Red Time (s)				1.0	1.0	1.0		1.0		1.0	1.0	
Lost Time Adjust (s)				0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)				4.5	4.5	4.5		4.5		4.5	4.5	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)				2.0	2.0	2.0		2.0		2.0	2.0	
Recall Mode				C-Max	C-Max	C-Max		Max		Max	Max	
Walk Time (s)				7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)				32.0	32.0	32.0		15.0		15.0	15.0	
Pedestrian Calls (#/hr)				0	0	0		0		0	0	
Act Effct Green (s)				30.0	30.0	30.0		36.0	115.5	76.5	76.5	
Actuated g/C Ratio				0.26	0.26	0.26		0.31	1.00	0.66	0.66	
v/c Ratio				0.07	0.81	0.17		0.21	0.08	0.14	0.11	
Control Delay (s/veh)				32.9	48.1	13.8		29.7	0.1	7.5	7.2	
Queue Delay				0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)				32.9	48.1	13.8		29.7	0.1	7.5	7.2	
LOS				C	D	B		C	A	A	A	
Approach Delay (s/veh)					44.4			22.0			7.3	
Approach LOS					D			C			A	
Queue Length 50th (ft)				19	280	12		67	0	31	32	
Queue Length 95th (ft)				44	354	51		93	0	53	45	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)				200		120			100	80		
Base Capacity (vph)				468	937	461		1616	1579	870	3435	
Starvation Cap Reductn				0	0	0		0	0	0	0	
Spillback Cap Reductn				0	0	0		0	0	0	0	
Storage Cap Reductn				0	0	0		0	0	0	0	
Reduced v/c Ratio				0.07	0.81	0.17		0.21	0.08	0.14	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	

Intersection Signal Delay (s/veh): 28.8	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

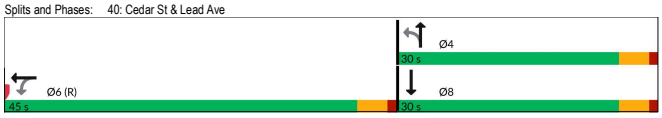


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Future Volume (vph)	0	0	0	19	1041	18	6	25	0	0	25	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.997						0.880	
Flt Protected					0.999			0.991				
Satd. Flow (prot)	0	0	0	0	3594	0	0	1883	0	0	1650	0
Flt Permitted					0.999			0.929				
Satd. Flow (perm)	0	0	0	0	3594	0	0	1765	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3						75	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		362			2138			144			153	
Travel Time (s)		9.9			58.3			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	20	1084	19	6	26	0	0	26	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1123	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	0			0	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	0			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (s)				45.0	45.0		30.0	30.0			30.0	
Total Split (%)				60.0%	60.0%		40.0%	40.0%			40.0%	
Maximum Green (s)				40.5	40.5		25.5	25.5			25.5	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					53.5			12.5			12.5	
Actuated g/C Ratio					0.71			0.17			0.17	
v/c Ratio					0.44			0.11			0.69	
Control Delay (s/veh)					2.0			25.1			30.1	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					2.0			25.1			30.1	
LOS					A			C			C	
Approach Delay (s/veh)					2.0			25.1			30.1	
Approach LOS					A			C			C	
Queue Length 50th (ft)					32			13			69	
Queue Length 95th (ft)					48			32			127	
Internal Link Dist (ft)		282			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)					2564			600			610	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.44			0.05			0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

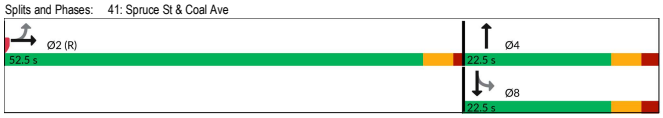


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Future Volume (vph)	11	821	6	0	0	0	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.98			1.00	
Frt		0.999						0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	3602	0	0	0	0	0	1703	0	0	1847	0
Flt Permitted		0.999									0.988	
Satd. Flow (perm)	0	3601	0	0	0	0	0	1703	0	0	1874	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						4				
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		29.5			28.1			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	855	6	0	0	0	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	872	0	0	0	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						0		1	0	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						0		20	0	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94										
Detector 2 Size(ft)		6										
Detector 2 Type		Cl+Ex										
Detector 2 Channel												
Detector 2 Extend (s)		0.0										
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (s)	52.5	52.5						22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%						30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						2.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		67.8						8.0			8.0	
Actuated g/C Ratio		0.90						0.11			0.11	
v/c Ratio		0.27						0.03			0.16	
Control Delay (s/veh)		1.7						23.2			32.5	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		1.7						23.2			32.5	
LOS		A						C			C	
Approach Delay (s/veh)		1.7						23.2			32.5	
Approach LOS		A						C			C	
Queue Length 50th (ft)		0						1			13	
Queue Length 95th (ft)		68						12			38	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		3255						389			424	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.27						0.02			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 2.9		Intersection LOS: A	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Future Volume (vph)	0	0	0	0	676	656	74	555	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5187	1615	1805	3610	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	5187	1585	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)						143	77					
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		338			367			362			140	
Travel Time (s)		9.2			10.0			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	704	683	77	578	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	20	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	20	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												

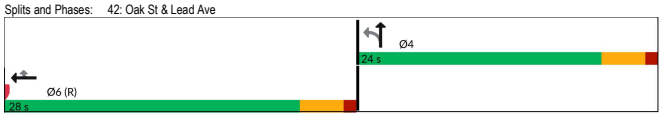
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					6			4				
Permitted Phases						6	4					
Detector Phase					6	6	4	4				
Switch Phase												
Minimum Initial (s)					8.0	8.0	8.0	8.0				
Minimum Split (s)					28.0	28.0	24.0	24.0				
Total Split (s)					28.0	28.0	24.0	24.0				
Total Split (%)					53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)					23.5	23.5	19.5	19.5				
Yellow Time (s)					3.5	3.5	3.5	3.5				
All-Red Time (s)					1.0	1.0	1.0	1.0				
Lost Time Adjust (s)					0.0	0.0	0.0	0.0				
Total Lost Time (s)					4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					2.0	2.0	2.0	2.0				
Recall Mode					C-Max	C-Max	None	None				
Walk Time (s)					7.0	7.0	7.0	7.0				
Flash Don't Walk (s)					10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)					0	0	0	0				
Act Effct Green (s)					29.4	29.4	13.6	13.6				
Actuated g/C Ratio					0.57	0.57	0.26	0.26				
v/c Ratio					0.24	0.71	0.15	0.61				
Control Delay (s/veh)					6.6	13.9	4.5	19.3				
Queue Delay					0.0	0.0	0.0	0.0				
Total Delay (s/veh)					6.6	13.9	4.5	19.3				
LOS					A	B	A	B				
Approach Delay (s/veh)					10.2			17.5				
Approach LOS					B			B				
Queue Length 50th (ft)					34	98	0	82				
Queue Length 95th (ft)					64	#326	20	106				
Internal Link Dist (ft)		258			287			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)					2934	958	725	1353				
Starvation Cap Reductn					0	0	0	0				
Spillback Cap Reductn					0	0	0	0				
Storage Cap Reductn					0	0	0	0				
Reduced v/c Ratio					0.24	0.71	0.11	0.43				

Intersection Summary	
Area Type:	Other
Cycle Length: 52	
Actuated Cycle Length: 52	
Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	

Intersection Signal Delay (s/veh): 12.6	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



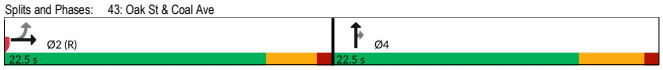
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Future Volume (vph)	401	801	0	0	0	0	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt									0.850			
Flt Protected	0.950											
Satd. Flow (prot)	1805	3610	0	0	0	0	0	3610	1615	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1805	3610	0	0	0	0	0	3610	1615	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	418								67			
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		9.6			29.5			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	418	834	0	0	0	0	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	834	0	0	0	0	0	235	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	20	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	20	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	22.5	22.5						22.5	22.5			
Total Split (s)	22.5	22.5						22.5	22.5			
Total Split (%)	50.0%	50.0%						50.0%	50.0%			
Maximum Green (s)	18.0	18.0						17.0	17.0			
Yellow Time (s)	3.5	3.5						4.5	4.5			
All-Red Time (s)	1.0	1.0						1.0	1.0			
Lost Time Adjust (s)	0.0	0.0						0.0	0.0			
Total Lost Time (s)	4.5	4.5						5.5	5.5			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0	2.0			
Recall Mode	C-Max	C-Max						None	None			
Walk Time (s)	7.0	7.0						7.0	7.0			
Flash Don't Walk (s)	10.0	10.0						10.0	10.0			
Pedestrian Calls (#/hr)	0	0						0	0			
Act Effct Green (s)	28.9	28.9						10.1	10.1			
Actuated g/C Ratio	0.64	0.64						0.22	0.22			
v/c Ratio	0.32	0.36						0.29	0.18			
Control Delay (s/veh)	1.5	5.8						15.6	6.9			
Queue Delay	0.0	0.0						0.0	0.0			
Total Delay (s/veh)	1.5	5.8						15.6	6.9			
LOS	A	A						B	A			
Approach Delay (s/veh)		4.4						13.5				
Approach LOS		A						B				
Queue Length 50th (ft)	0	55						26	2			
Queue Length 95th (ft)	26	86						49	25			
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)									120			
Base Capacity (vph)	1310	2321						1363	651			
Starvation Cap Reductn	0	0						0	0			
Spillback Cap Reductn	0	0						0	0			
Storage Cap Reductn	0	0						0	0			
Reduced v/c Ratio	0.32	0.36						0.17	0.12			

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay (s/veh): 6.2	Intersection LOS: A

Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

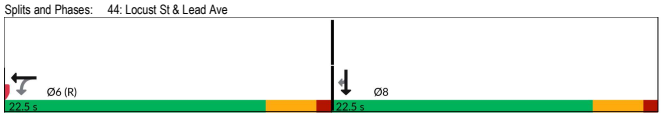


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Future Volume (vph)	0	0	0	175	642	0	0	0	0	0	375	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor											1.00	0.99
Frt											0.955	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1787	3610	0	0	0	0	0	3289	1470
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1787	3610	0	0	0	0	0	3289	1450
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				182							120	120
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		29.7			9.2			3.8			1.9	
Confl. Peds. (#/hr)	1		1				1		1	2		2
Confl. Bikes (#/hr)			1			10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	182	669	0	0	0	0	0	391	416
Shared Lane Traffic (%)												40%
Lane Group Flow (vph)	0	0	0	182	669	0	0	0	0	0	557	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				20	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				20	6						6	20
Detector 1 Type				CI+Ex	CI+Ex						CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					CI+Ex						CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					6						8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6								8
Detector Phase				6	6						8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	10.0
Minimum Split (s)				22.5	22.5						22.5	22.5
Total Split (s)				22.5	22.5						22.5	22.5
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				18.0	18.0						18.0	18.0
Yellow Time (s)				3.5	3.5						3.5	3.5
All-Red Time (s)				1.0	1.0						1.0	1.0
Lost Time Adjust (s)				0.0	0.0						0.0	0.0
Total Lost Time (s)				4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0						3.0	3.0
Recall Mode				C-Max	C-Max						None	None
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Don't Walk (s)				11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)				22.2	22.2						13.8	13.8
Actuated g/C Ratio				0.49	0.49						0.31	0.31
v/c Ratio				0.19	0.38						0.51	0.48
Control Delay (s/veh)				2.5	8.7						11.1	9.3
Queue Delay				0.0	0.0						0.0	0.0
Total Delay (s/veh)				2.5	8.7						11.1	9.3
LOS				A	A						B	A
Approach Delay (s/veh)					7.3						10.5	
Approach LOS					A						B	
Queue Length 50th (ft)				0	50						48	27
Queue Length 95th (ft)				26	98						70	64
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)				975	1784						1387	652
Starvation Cap Reductn				0	0						0	0
Spillback Cap Reductn				0	0						0	0
Storage Cap Reductn				0	0						0	0
Reduced v/c Ratio				0.19	0.38						0.40	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 8 (18%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave



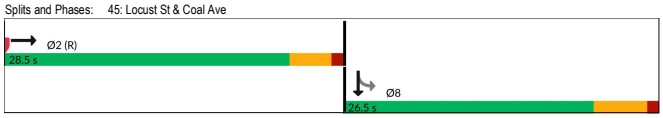
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Future Volume (vph)	0	807	95	0	0	0	0	0	0	401	177	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00										
Frt		0.984										
Flt Protected										0.950	0.974	
Satd. Flow (prot)	0	5094	0	0	0	0	0	0	0	1643	3368	0
Flt Permitted										0.950	0.974	
Satd. Flow (perm)	0	5094	0	0	0	0	0	0	0	1643	3368	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)		47								84	84	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		9.8			9.6			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	841	99	0	0	0	0	0	0	418	184	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	209	393	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								20	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								20	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		2									8	
Permitted Phases										8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2								8	8	
Switch Phase												
Minimum Initial (s)		10.0								10.0	10.0	
Minimum Split (s)		28.5								26.5	26.5	
Total Split (s)		28.5								26.5	26.5	
Total Split (%)		51.8%								48.2%	48.2%	
Maximum Green (s)		24.0								21.0	21.0	
Yellow Time (s)		3.5								4.5	4.5	
All-Red Time (s)		1.0								1.0	1.0	
Lost Time Adjust (s)		0.0								0.0	0.0	
Total Lost Time (s)		4.5								5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0								2.0	2.0	
Recall Mode		C-Max								None	None	
Walk Time (s)		7.0								7.0	7.0	
Flash Don't Walk (s)		13.0								10.0	10.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		33.4								11.6	11.6	
Actuated g/C Ratio		0.61								0.21	0.21	
v/c Ratio		0.30								0.51	0.51	
Control Delay (s/veh)		5.5								15.8	16.9	
Queue Delay		0.0								0.0	0.0	
Total Delay (s/veh)		5.5								15.8	16.9	
LOS		A								B	B	
Approach Delay (s/veh)		5.5									16.6	
Approach LOS		A									B	
Queue Length 50th (ft)		39								39	50	
Queue Length 95th (ft)		76								84	75	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)												
Base Capacity (vph)		3111								679	1337	
Starvation Cap Reductn		0								0	0	
Spillback Cap Reductn		0								0	0	
Storage Cap Reductn		0								0	0	
Reduced v/c Ratio		0.30								0.31	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 55
Actuated Cycle Length: 55
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay (s/veh): 9.8 Intersection LOS: A
Intersection Capacity Utilization 41.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 45: Locust St & Coal Ave



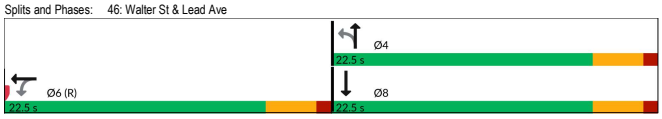
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Future Volume (vph)	0	0	0	23	925	15	3	6	0	0	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt					0.998						0.946	
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	3597	0	0	1870	0	0	1788	0
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	3597	0	0	1900	0	0	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						4	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		30.2			29.7			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	24	964	16	3	6	0	0	6	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1004	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6			4					
Detector Phase				6	6		4	4			8	
Switch Phase												
Minimum Initial (s)				8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (s)				22.5	22.5		22.5	22.5			22.5	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				18.0	18.0		18.0	18.0			18.0	
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)					0.0			0.0			0.0	
Total Lost Time (s)					4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0		2.0	2.0			2.0	
Recall Mode				C-Max	C-Max		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Don't Walk (s)				10.0	10.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			8.0			8.0	
Actuated g/C Ratio					0.92			0.18			0.18	
v/c Ratio					0.30			0.03			0.03	
Control Delay (s/veh)					1.1			10.4			13.4	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					1.1			10.4			13.4	
LOS					A			B			B	
Approach Delay (s/veh)					1.1			10.4			13.4	
Approach LOS					A			B			B	
Queue Length 50th (ft)					0			2			1	
Queue Length 95th (ft)					62			m5			10	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)					3325			760			717	
Starvation Cap Reductn					0			0			0	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.30			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 37 (82%), Referenced to phase 2: and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 1.3		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave

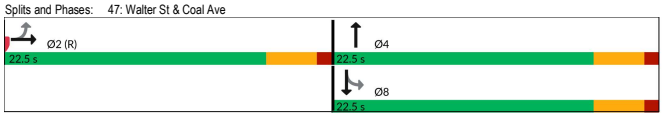


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Future Volume (vph)	3	834	4	0	0	0	0	7	14	4	31	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.999						0.908				
Flt Protected											0.994	
Satd. Flow (prot)	0	3606	0	0	0	0	0	1725	0	0	1889	0
Flt Permitted											0.957	
Satd. Flow (perm)	0	3606	0	0	0	0	0	1725	0	0	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						15				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		30.1			19.5			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	869	4	0	0	0	0	7	15	4	32	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	876	0	0	0	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		2						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2									8		
Detector Phase	2	2						4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0						8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (s)	22.5	22.5						22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0						18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.5						4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0						2.0		2.0	2.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0						10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		38.2						8.0			8.0	
Actuated g/C Ratio		0.85						0.18			0.18	
v/c Ratio		0.29						0.07			0.11	
Control Delay (s/veh)		2.6						11.1			14.0	
Queue Delay		0.0						0.0			0.0	
Total Delay (s/veh)		2.6						11.1			14.0	
LOS		A						B			B	
Approach Delay (s/veh)		2.6						11.1			14.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)		0						2			7	
Queue Length 95th (ft)		70						15			21	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		3061						699			727	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.29						0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 27 (60%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 3.2		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Future Volume (vph)	0	0	0	70	774	67	1	104	420	0	0	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	1		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor				1.00		0.98						
Frt						0.850						
Flt Protected				0.950				0.950				
Satd. Flow (prot)	0	0	0	1805	3610	1615	0	1805	3610	0	0	3610
Flt Permitted				0.950				0.340				
Satd. Flow (perm)	0	0	0	1803	3610	1583	0	646	3610	0	0	3610
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)						52						
Link Speed (mph)		25			25				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		14.9			30.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	73	806	70	1	108	438	0	0	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	73	806	70	0	109	438	0	0	553
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		12			12				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors				1	2	1	1	1	0			0
Detector Template				Left	Thru	Right	Left	Left	Thru			Thru
Leading Detector (ft)				20	100	20	20	35	0			0
Trailing Detector (ft)				0	0	0	0	2	0			0
Detector 1 Position(ft)				0	0	0	0	2	0			0
Detector 1 Size(ft)				20	6	20	20	33	6			6
Detector 1 Type				CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex			CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0	0.0			0.0
Detector 2 Position(ft)					94							
Detector 2 Size(ft)					6							
Detector 2 Type					CI+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	144
Future Volume (vph)	144
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	117
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	150
Shared Lane Traffic (%)	
Lane Group Flow (vph)	150
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)					0.0							
Turn Type				Perm	NA	Perm	pm+pt	pm+pt	NA			NA
Protected Phases					2		1	1	4			4
Permitted Phases				2		2	4	4				
Detector Phase				2	2	2	1	1	4			4
Switch Phase												
Minimum Initial (s)				8.0	8.0	8.0	3.0	3.0	8.0			8.0
Minimum Split (s)				43.2	43.2	43.2	26.4	26.4	50.4			50.4
Total Split (s)				43.2	43.2	43.2	31.9	31.9	50.4			50.4
Total Split (%)				34.4%	34.4%	34.4%	25.4%	25.4%	40.2%			40.2%
Maximum Green (s)				38.2	38.2	38.2	27.4	27.4	45.9			45.9
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5	3.5			3.5
All-Red Time (s)				1.5	1.5	1.5	1.0	1.0	1.0			1.0
Lost Time Adjust (s)				0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)				5.0	5.0	5.0		4.5	4.5			4.5
Lead/Lag				Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)				3.0	3.0	3.0	1.5	1.5	3.0			3.0
Recall Mode				C-Max	C-Max	C-Max	None	None	Max			Max
Walk Time (s)				7.0	7.0	7.0	0.0	0.0	7.0			7.0
Flash Don't Walk (s)				24.0	24.0	24.0	0.0	0.0	14.0			14.0
Pedestrian Calls (#/hr)				0	0	0	0	0	0			0
Act Effct Green (s)				61.4	61.4	61.4		50.1	45.9			45.9
Actuated g/C Ratio				0.49	0.49	0.49		0.40	0.37			0.37
v/c Ratio				0.08	0.46	0.09		0.37	0.33			0.42
Control Delay (s/veh)				17.5	22.2	6.8		28.8	29.6			31.0
Queue Delay				0.0	0.0	0.0		0.0	0.9			0.0
Total Delay (s/veh)				17.5	22.2	6.8		28.8	30.6			31.0
LOS				B	C	A		C	C			C
Approach Delay (s/veh)					20.7				30.2			26.2
Approach LOS					C				C			C
Queue Length 50th (ft)				31	220	7		52	134			175
Queue Length 95th (ft)				58	275	33		90	178			227
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)				115		115		90				
Base Capacity (vph)				881	1765	800		630	1320			1320
Starvation Cap Reductn				0	0	0		0	597			0
Spillback Cap Reductn				0	0	0		0	0			0
Storage Cap Reductn				0	0	0		0	0			0
Reduced v/c Ratio				0.08	0.46	0.09		0.17	0.61			0.42

Intersection Summary

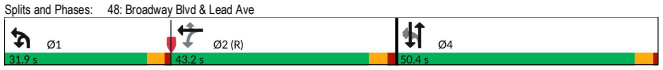
Area Type: Other
Cycle Length: 125.5
Actuated Cycle Length: 125.5
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.23
Control Delay (s/veh)	8.6
Queue Delay	0.0
Total Delay (s/veh)	8.6
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	17
Queue Length 95th (ft)	63
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	649
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.23

Intersection Summary

Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Future Volume (vph)	50	660	77	0	0	0	0	468	58	2	91	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	1		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor	1.00		0.98						0.98		1.00	
Frt			0.850						0.850			
Flt Protected	0.950										0.950	
Satd. Flow (prot)	1805	3610	1615	0	0	0	0	3610	1615	0	1805	3610
Flt Permitted	0.950										0.383	
Satd. Flow (perm)	1796	3610	1576	0	0	0	0	3610	1591	0	727	3610
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			80						64			
Link Speed (mph)		25			25			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		13.0			30.1			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	688	80	0	0	0	0	488	60	2	95	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	688	80	0	0	0	0	488	60	0	97	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm					NA	Perm	custom	pm+pt	NA
Protected Phases		2						4			1	4
Permitted Phases	2		2						4	1	4	
Minimum Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2					46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%					39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7					41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5					4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0					1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5					5.0	5.0		4.5	5.0
Lead/Lag	Lead	Lead	Lead							Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0					13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	0
Act Effct Green (s)	37.7	37.7	37.7					41.8	41.8		67.8	41.8
Actuated g/C Ratio	0.31	0.31	0.31					0.35	0.35		0.57	0.35
v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.42
Control Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		10.8	31.2
Queue Delay	0.0	0.0	0.0					0.0	0.0		0.0	1.4
Total Delay (s/veh)	29.8	37.6	7.1					30.6	6.3		10.8	32.5
LOS	C	D	A					C	A		B	C
Approach Delay (s/veh)		34.1						27.9				29.2
Approach LOS		C						C				C
Queue Length 50th (ft)	28	236	0					148	0		30	164
Queue Length 95th (ft)	59	301	36					196	28		53	215
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)	564	1134	549					1257	595		639	1257
Starvation Cap Reductn	0	0	0					0	0		0	501
Spillback Cap Reductn	0	0	0					0	0		0	0
Storage Cap Reductn	0	0	0					0	0		0	0
Reduced v/c Ratio	0.09	0.61	0.15					0.39	0.10		0.15	0.70

Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 0.61
Intersection Signal Delay (s/veh): 30.9 Intersection LOS: C
Intersection Capacity Utilization 64.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 49: Broadway Blvd & Coal Ave

Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	113	490
Future Volume (vph)	42	46	513	33	113	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.991
Satd. Flow (prot)	1726	0	1885	0	0	1883
Flt Permitted	0.977					0.991
Satd. Flow (perm)	1726	0	1885	0	0	1883
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	118	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	628
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	102	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.990			0.974			0.996			0.986	
Flt Protected		0.992			0.990			0.998			0.997	
Satd. Flow (prot)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.992			0.990			0.998			0.997	
Satd. Flow (perm)	0	1866	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5				2		2	2		2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	106	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization	36.5%	ICU Level of Service A		
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	95	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.984			0.968			0.997			0.997	
Flt Protected		0.998			0.986		0.950			0.950		
Satd. Flow (prot)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.998			0.986		0.950			0.950		
Satd. Flow (perm)	0	1866	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	99	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization	33.7%	ICU Level of Service A		
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	87	11	15	15	6	2
Future Volume (vph)	87	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.985				0.966	
Flt Protected	0.957			0.976		
Satd. Flow (prot)	1791	0	0	1854	1835	0
Flt Permitted	0.957			0.976		
Satd. Flow (perm)	1791	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	91	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization	20.7%	ICU Level of Service A		
Analysis Period (min)	15			

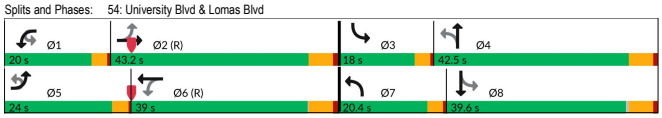
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

Intersection Summary

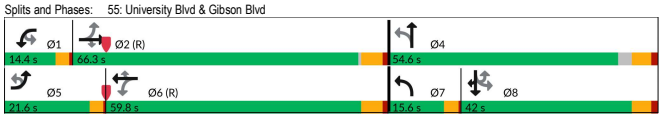
Area Type: Other
Cycle Length: 139
Actuated Cycle Length: 139
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay (s/veh): 22.9 Intersection LOS: C

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	411	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	411	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.92			1.00		0.99	0.96		
Frt				0.850			0.993			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3580	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	267	1900	1489	0	500	3580	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	428	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	449	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.93	0.47	0.09		0.68	0.32		0.22	0.80		
Control Delay (s/veh)		924.6	28.1	1.7		102.7	29.2		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		924.6	28.1	1.7		102.7	29.2		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			237.5				35.6			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~238	282	0		35	142		28	193		
Queue Length 95th (ft)		#401	410	12		#104	186		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		54	938	786		69	1407		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.93	0.47	0.09		0.62	0.32		0.18	0.66		

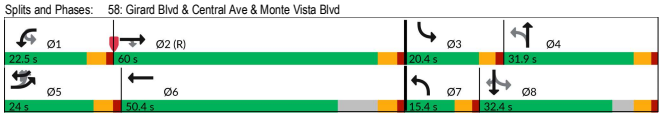
Intersection Summary
Area Type: Other
Cycle Length: 134.8
Actuated Cycle Length: 134.8
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.93

Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 110.2 Intersection LOS: F
Intersection Capacity Utilization 83.8% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	902	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	1863	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		19.5			9.8			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	940	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1246	0	0	0
Future Volume (vph)	0	0	1246	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1863
Link Speed (mph)		25	25		30	
Link Distance (ft)		367	362		102	
Travel Time (s)		10.0	9.9		2.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	1298	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1298	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 37.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Future Volume (vph)	1	10	1268	271	1	230	974	8	76	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00				1.00					
Frt			0.974				0.999				0.850	
Flt Protected		0.950				0.950				0.953		
Satd. Flow (prot)	0	1805	5040	0	0	1805	5181	0	0	1621	1615	0
Flt Permitted		0.262				0.107				0.549		
Satd. Flow (perm)	0	497	5040	0	0	203	5181	0	0	934	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			46				2				56	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)	1	1		1								4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%
Adj. Flow (vph)	1	11	1349	288	1	245	1036	9	81	2	49	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	1637	0	0	246	1045	0	0	83	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	79	14
Future Volume (vph)	79	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.980	
Flt Protected	0.998	
Satd. Flow (prot)	1853	0
Flt Permitted	0.989	
Satd. Flow (perm)	1836	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	84	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	103	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (s)	54.0	54.0	54.0		30.0	30.0	84.0		36.0	36.0	36.0	36.0
Total Split (%)	45.0%	45.0%	45.0%		25.0%	25.0%	70.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	48.3	48.3	48.3		26.5	26.5	78.3		30.5	30.5	30.5	30.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		77.1	77.1			96.7	94.5			14.3	14.3	
Actuated g/C Ratio		0.64	0.64			0.81	0.79			0.12	0.12	
v/c Ratio		0.04	0.50			0.70	0.26			0.75	0.20	
Control Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		24.6	26.9			24.8	3.9			87.1	11.5	
LOS		C	C			C	A			F	B	
Approach Delay (s/veh)			26.9				7.9			59.0		
Approach LOS			C				A			E		
Queue Length 50th (ft)		5	400			63	64			63	0	
Queue Length 95th (ft)		m21	512			157	103			115	30	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		319	3254			517	4081			237	452	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.04	0.50			0.48	0.26			0.35	0.11	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

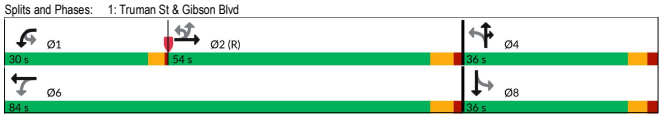
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	14.3	
Actuated g/C Ratio	0.12	
v/c Ratio	0.46	
Control Delay (s/veh)	51.2	
Queue Delay	0.0	
Total Delay (s/veh)	51.2	
LOS	D	
Approach Delay (s/veh)	51.2	
Approach LOS	D	
Queue Length 50th (ft)	70	
Queue Length 95th (ft)	120	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	471	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.22	

Intersection Summary

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Future Volume (vph)	26	90	1473	441	3	72	997	36	4	10	2	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215		300		0
Storage Lanes		1		1		1		1		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt				0.850				0.850			0.893	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	1805	3224	0
Flt Permitted		0.236				0.128						
Satd. Flow (perm)	0	448	5187	1615	0	243	5136	1615	0	1900	3224	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				420				86			329	
Link Speed (mph)			45				45				30	
Link Distance (ft)			2659				921				371	
Travel Time (s)			40.3				14.0				8.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	28	96	1567	469	3	77	1061	38	4	11	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1567	469	0	80	1061	38	0	15	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	40	40	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (vph)	2	61	95	138
Future Volume (vph)	2	61	95	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		150		150
Storage Lanes		1		1
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99
Frt				0.850
Flt Protected		0.950		
Satd. Flow (prot)	0	1805	1900	1615
Flt Permitted		0.541		
Satd. Flow (perm)	0	1026	1900	1592
Right Turn on Red				Yes
Satd. Flow (RTOR)				147
Link Speed (mph)			30	
Link Distance (ft)			2595	
Travel Time (s)			59.0	
Confl. Peds. (#/hr)	1	1		1
Confl. Bikes (#/hr)				2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	2	65	101	147
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	67	101	147
Enter Blocked Intersection	No	No	No	No
Lane Alignment	R NA	Left	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9
Number of Detectors	1	1	1	1
Detector Template	Left	Left	Thru	Right
Leading Detector (ft)	20	30	30	30
Trailing Detector (ft)	0	5	5	5
Detector 1 Position(ft)	0	5	5	5
Detector 1 Size(ft)	20	25	25	25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	8.0	
Minimum Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	14.4	40.8	
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	12.0%	34.0%	
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	10.9	35.3	
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.5	
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	0.5	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0		3.5	5.5	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	
Flash Don't Walk (s)			20.0	20.0			16.0	16.0			27.0	
Pedestrian Calls (#/hr)			0	0			0	0			0	
Act Effct Green (s)		92.7	86.1	86.1		91.7	84.4	84.4		8.9	8.7	
Actuated g/C Ratio		0.77	0.72	0.72		0.76	0.70	0.70		0.07	0.07	
v/c Ratio		0.30	0.42	0.37		0.31	0.29	0.03		0.11	0.01	
Control Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		5.7	9.6	4.7		9.5	7.1	0.1		47.9	0.0	
LOS		A	A	A		A	A	A		D	A	
Approach Delay (s/veh)			8.4				7.0				32.6	
Approach LOS			A				A				C	
Queue Length 50th (ft)		3	143	41		8	78	0		12	0	
Queue Length 95th (ft)		56	321	151		43	150	0		28	0	
Internal Link Dist (ft)			2579				841				291	
Turn Bay Length (ft)		250		250		339		215		300		
Base Capacity (vph)		492	3721	1277		366	3611	1161		207	1180	
Starvation Cap Reductn		0	0	0		0	0	0		0	0	
Spillback Cap Reductn		0	0	0		0	0	0		0	0	
Storage Cap Reductn		0	0	0		0	0	0		0	0	
Reduced v/c Ratio		0.25	0.42	0.37		0.22	0.29	0.03		0.07	0.01	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	

Lane Group	SBU	SBL	SBT	SBR
Detector 2 Extend (s)				
Turn Type	custom	pm+pt	NA	Perm
Protected Phases		3	8	
Permitted Phases	3	8		8
Detector Phase	3	3	8	8
Switch Phase				
Minimum Initial (s)	3.0	3.0	8.0	8.0
Minimum Split (s)	14.4	14.4	40.8	40.8
Total Split (s)	14.4	14.4	40.8	40.8
Total Split (%)	12.0%	12.0%	34.0%	34.0%
Maximum Green (s)	10.9	10.9	35.3	35.3
Yellow Time (s)	3.0	3.0	3.5	3.5
All-Red Time (s)	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0
Recall Mode	None	None	None	None
Walk Time (s)			7.0	7.0
Flash Don't Walk (s)			31.0	31.0
Pedestrian Calls (#/hr)			0	0
Act Effct Green (s)		17.6	11.8	11.8
Actuated g/C Ratio		0.15	0.10	0.10
v/c Ratio		0.29	0.54	0.51
Control Delay (s/veh)		45.6	61.7	14.1
Queue Delay		0.0	0.0	0.0
Total Delay (s/veh)		45.6	61.7	14.1
LOS		D	E	B
Approach Delay (s/veh)			36.1	
Approach LOS			D	
Queue Length 50th (ft)		48	76	0
Queue Length 95th (ft)		82	129	60
Internal Link Dist (ft)			2515	
Turn Bay Length (ft)		150		150
Base Capacity (vph)		245	558	572
Starvation Cap Reductn		0	0	0
Spillback Cap Reductn		0	0	0
Storage Cap Reductn		0	0	0
Reduced v/c Ratio		0.27	0.18	0.26

Intersection Summary

Intersection Signal Delay (s/veh): 10.4	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1520	1077	48	58	44
Future Volume (vph)	27	1520	1077	48	58	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	232			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor					1.00	
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	5187	5107	0	1805	1615
Flt Permitted	0.208				0.950	
Satd. Flow (perm)	395	5187	5107	0	1797	1615
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			47
Link Speed (mph)		45	45		15	
Link Distance (ft)		921	3760		162	
Travel Time (s)		14.0	57.0		7.4	
Confl. Peds. (#/hr)					4	4
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	29	1617	1146	51	62	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1617	1197	0	62	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	37	100	100		38	38
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						

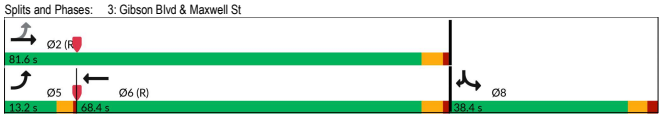
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Prot
Protected Phases	5	2	6		8	8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (s)	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0			
Flash Don't Walk (s)		13.0	13.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.0	102.5	97.7		10.7	10.7
Actuated g/C Ratio	0.86	0.85	0.81		0.09	0.09
v/c Ratio	0.07	0.37	0.29		0.39	0.25
Control Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	1.9	4.4	3.1		57.8	17.2
LOS	A	A	A		E	B
Approach Delay (s/veh)		4.4	3.1		40.3	
Approach LOS		A	A		D	
Queue Length 50th (ft)	7	189	63		46	0
Queue Length 95th (ft)	m0	1	79		89	37
Internal Link Dist (ft)		841	3680		82	
Turn Bay Length (ft)	232					
Base Capacity (vph)	452	4429	4158		494	476
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.06	0.37	0.29		0.13	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Future Volume (vph)	2	79	1807	29	85	993	70	3	35	147	65	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98			0.98				1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5136	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.242			0.069			0.733			0.589	
Satd. Flow (perm)	0	459	5136	1589	131	5136	1581	1393	3610	1615	1118	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			156		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)	3	3		3							1	
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	84	1922	31	90	1056	74	3	37	156	69	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	1922	31	90	1056	74	3	37	156	69	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15			9	15
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	61
Future Volume (vph)	61
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1591
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	65
Shared Lane Traffic (%)	
Lane Group Flow (vph)	65
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		85.0	77.4	77.4	87.3	79.7	79.7	17.7	12.3	12.3	23.7	20.1
Actuated g/C Ratio		0.71	0.65	0.65	0.73	0.66	0.66	0.15	0.10	0.10	0.20	0.17
v/c Ratio		0.22	0.58	0.03	0.49	0.31	0.07	0.01	0.10	0.51	0.26	0.12
Control Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		11.0	21.7	3.3	26.0	14.8	7.0	36.0	49.4	14.0	40.8	42.3
LOS		B	C	A	C	B	A	D	D	B	D	D
Approach Delay (s/veh)			21.0			15.2			21.0			28.0
Approach LOS			C			B			C			C
Queue Length 50th (ft)		32	358	0	34	154	1	2	13	0	44	24
Queue Length 95th (ft)		m63	468	m6	83	205	30	10	31	64	82	57
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		461	3311	1055	249	3410	1078	301	881	512	283	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.58	0.03	0.36	0.31	0.07	0.01	0.04	0.30	0.24	0.08

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	

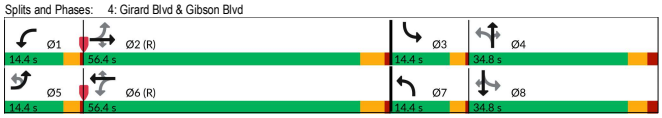
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	34.8
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	20.1
Actuated g/C Ratio	0.17
v/c Ratio	0.19
Control Delay (s/veh)	6.3
Queue Delay	0.0
Total Delay (s/veh)	6.3
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	26
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	453
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.14

Intersection Summary

Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Future Volume (vph)	5	165	1425	352	2	235	774	76	1	206	188	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220		190		0
Storage Lanes		1		1		1		1		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00
Ped Bike Factor						1.00		0.99		1.00		0.99
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	0	3467	5187	1615
Flt Permitted		0.330				0.094				0.421		
Satd. Flow (perm)	0	627	5187	1615	0	179	5136	1592	0	1533	5187	1591
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				374				91				305
Link Speed (mph)			45				45				40	
Link Distance (ft)			2630				2614				853	
Travel Time (s)			39.8				39.6				14.5	
Confl. Peds. (#/hr)					2	2		2	2	2		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	5	176	1516	374	2	250	823	81	1	219	200	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	181	1516	374	0	252	823	81	0	220	200	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				24	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	1	2	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94	
Detector 2 Size(ft)			6				6				6	
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex	
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	101	162	137
Future Volume (vph)	101	162	137
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	200		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99	
Frt		0.931	
Flt Protected	0.950		
Satd. Flow (prot)	1805	3326	0
Flt Permitted	0.621		
Satd. Flow (perm)	1179	3326	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		146	
Link Speed (mph)		40	
Link Distance (ft)		766	
Travel Time (s)		13.1	
Confl. Peds. (#/hr)	1		1
Confl. Bikes (#/hr)			
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	107	172	146
Shared Lane Traffic (%)			
Lane Group Flow (vph)	107	318	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane		Yes	
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	
Detector Template	Left	Thru	
Leading Detector (ft)	20	100	
Trailing Detector (ft)	0	0	
Detector 1 Position(ft)	0	0	
Detector 1 Size(ft)	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0				0.0	
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5	2		2	1	6		6	7	4		4
Detector Phase	5	5	2	2	1	1	6	6	7	7	4	4
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0
Minimum Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (s)	18.0	18.0	49.2	49.2	18.0	18.0	49.2	49.2	10.8	10.8	42.0	42.0
Total Split (%)	15.0%	15.0%	41.0%	41.0%	15.0%	15.0%	41.0%	41.0%	9.0%	9.0%	35.0%	35.0%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	14.5	43.2	43.2	7.3	7.3	36.0	36.0
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	3.0	4.0	4.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	0.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0			7.0	7.0
Flash Don't Walk (s)			24.0	24.0			25.0	25.0			30.0	30.0
Pedestrian Calls (#/hr)			0	0			0	0			0	0
Act Effct Green (s)		68.8	57.7	57.7		81.1	66.5	66.5		28.7	19.0	19.0
Actuated g/C Ratio		0.57	0.48	0.48		0.68	0.55	0.55		0.24	0.16	0.16
v/c Ratio		0.41	0.61	0.39		0.71	0.29	0.09		0.46	0.24	0.72
Control Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		12.2	22.1	5.7		50.7	15.1	6.6		37.1	44.3	17.5
LOS		B	C	A		D	B	A		D	D	B
Approach Delay (s/veh)			18.3				22.2				29.8	
Approach LOS			B				C				C	
Queue Length 50th (ft)		39	160	0		152	61	0		71	52	42
Queue Length 95th (ft)		m107	297	114		258	132	25		93	69	136
Internal Link Dist (ft)			2550				2534				773	
Turn Bay Length (ft)		438		290		400		220		190		
Base Capacity (vph)		532	2495	971		365	2847	923		485	1556	690
Starvation Cap Reductn		0	0	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.34	0.61	0.39		0.69	0.29	0.09		0.45	0.13	0.53

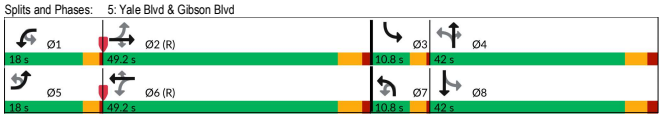
Intersection Summary
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	3.0	16.0	
Minimum Split (s)	10.8	42.0	
Total Split (s)	10.8	42.0	
Total Split (%)	9.0%	35.0%	
Maximum Green (s)	7.3	36.0	
Yellow Time (s)	3.0	4.0	
All-Red Time (s)	0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	3.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.5	4.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		29.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	28.2	18.7	
Actuated g/C Ratio	0.24	0.16	
v/c Ratio	0.34	0.50	
Control Delay (s/veh)	36.8	26.7	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	36.8	26.7	
LOS	D	C	
Approach Delay (s/veh)		29.3	
Approach LOS		C	
Queue Length 50th (ft)	67	65	
Queue Length 95th (ft)	103	100	
Internal Link Dist (ft)		686	
Turn Bay Length (ft)	200		
Base Capacity (vph)	317	1100	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.34	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 22.4 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

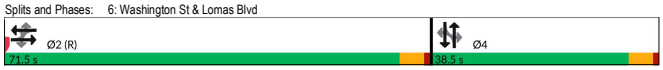
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		4.3	4.6		72.2	60.9		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			4.6			64.0			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		7	87		53	129		34	94
Queue Length 95th (ft)		29	53		20	146		102	202		72	154
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 16.4	Intersection LOS: B
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



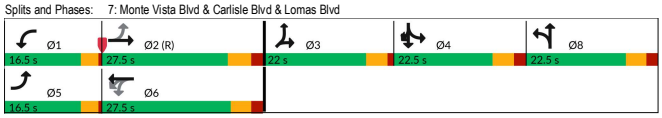
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		1.00		1.00	1.00		1.00
Frt		0.994					0.986			0.991		
Flt Protected	0.950				0.950		0.996		0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	1805	0	5081	0	1805	1881	0	1805
Flt Permitted	0.155				0.478		0.841		0.950			0.950
Satd. Flow (perm)	294	5156	0	0	906	0	4290	0	1800	1881	0	1804
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			25		
Link Distance (ft)		2652					2690			2352		
Travel Time (s)		51.7					52.4			64.1		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	21	0	1036	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Split	NA		Split
Protected Phases	5	2			1		6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	6	6		8	8		4

Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			162		
Link Speed (mph)	25			35	
Link Distance (ft)	634			350	
Travel Time (s)	17.3			6.8	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Prot	Prot	Prot	Prot
Protected Phases	4	4	4	3	3
Permitted Phases					
Detector Phase	4	4	4	3	3

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0		8.0
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5		23.5
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5		22.5
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%		20.3%
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0		17.0
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0			3.5		5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lag	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	Max	Max		None	None		None
Walk Time (s)		7.0				7.0	7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0				0	0		0	0		0
Act Effct Green (s)	51.6	45.5			45.2		39.3		14.7	14.7		14.0
Actuated g/C Ratio	0.46	0.41			0.41		0.35		0.13	0.13		0.13
v/c Ratio	0.33	0.22			0.05		0.68		0.17	0.80		0.37
Control Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
Queue Delay	0.0	0.0			0.0		0.0		0.0	0.0		0.0
Total Delay (s/veh)	23.6	24.5			21.2		36.0		43.2	69.0		47.9
LOS	C	C			C		D		D	E		D
Approach Delay (s/veh)		24.3					35.7			64.6		
Approach LOS		C					D			E		
Queue Length 50th (ft)	33	72			8		234		26	137		55
Queue Length 95th (ft)	74	130			27		#408		59	#228		101
Internal Link Dist (ft)		2572					2610			2272		
Turn Bay Length (ft)	95				100				112			130
Base Capacity (vph)	313	2112			521		1528		279	292		280
Starvation Cap Reductn	0	0			0		0		0	0		0
Spillback Cap Reductn	0	0			0		0		0	0		0
Storage Cap Reductn	0	0			0		0		0	0		0
Reduced v/c Ratio	0.27	0.22			0.04		0.68		0.15	0.68		0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.5	23.5	23.5	22.0	22.0
Total Split (s)	22.5	22.5	22.5	22.0	22.0
Total Split (%)	20.3%	20.3%	20.3%	19.8%	19.8%
Maximum Green (s)	17.0	17.0	17.0	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None	None
Walk Time (s)	0.0	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0	0.0		
Pedestrian Calls (#/hr)	0	0	0		
Act Effct Green (s)	14.0	14.0	14.0	11.7	11.7
Actuated g/C Ratio	0.13	0.13	0.13	0.11	0.11
v/c Ratio	0.74	0.48	0.39	0.61	0.31
Control Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	52.0	7.2	60.6	47.6
LOS	E	D	A	E	D
Approach Delay (s/veh)	43.5			54.8	
Approach LOS	D			D	
Queue Length 50th (ft)	123	65	0	81	35
Queue Length 95th (ft)	191	114	36	135	61
Internal Link Dist (ft)	554			270	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	295	251	387	284	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.35	0.41	0.21

Intersection Summary

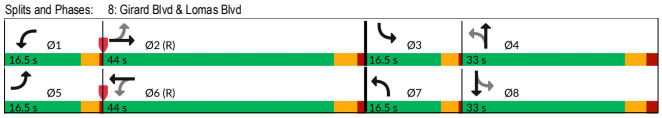
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.955	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1715	1710	0
Flt Permitted	0.270			0.428			0.537			0.601	0.997	
Satd. Flow (perm)	513	5053	0	808	5078	0	1018	1820	0	1080	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1515			2652			2313			578	
Travel Time (s)		29.5			51.7			52.6			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	33	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	36	0		36	0		36	36		36	36	
Trailing Detector (ft)	3	0		2	0		1	1		3	3	
Detector 1 Position(ft)	3	0		2	0		1	1		3	3	
Detector 1 Size(ft)	33	6		34	6		35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	64.9	58.3		69.7	61.9		32.3	24.4		26.0	21.0	
Actuated g/C Ratio	0.59	0.53		0.63	0.56		0.29	0.22		0.24	0.19	
v/c Ratio	0.14	0.19		0.23	0.33		0.26	0.50		0.11	0.78	
Control Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.0	13.4		9.8	14.3		29.0	39.0		26.4	52.3	
LOS	A	B		A	B		C	D		C	D	
Approach Delay (s/veh)		13.1			13.7			35.8			49.4	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	12	56		32	121		51	124		17	157	
Queue Length 95th (ft)	33	77		71	189		81	185		37	217	
Internal Link Dist (ft)		1435			2572			2233			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	480	2690		636	2867		392	473		388	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.33		0.24	0.44		0.09	0.55	

Intersection Summary

Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.4		Intersection LOS: C	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Future Volume (vph)	8	207	838	54	3	36	870	104	15	26	13	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99						1.00		0.99	
Frt			0.991				0.984				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5109	0	0	1805	3552	0	1805	1900	1615	0
Flt Permitted		0.224				0.290			0.508			
Satd. Flow (perm)	0	426	5109	0	0	551	3552	0	961	1900	1592	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			9				12				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	25	25		25					4		4	
Confl. Bikes (#/hr)				12							4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	220	891	57	3	38	926	111	16	28	14	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	948	0	0	41	1037	0	16	28	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	125
Future Volume (vph)	25	125
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.973	
Satd. Flow (prot)	1849	1615
Flt Permitted	0.809	
Satd. Flow (perm)	1537	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	27	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	133
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		91.2	85.3			83.4	76.7		14.7	13.9	111.5	
Actuated g/C Ratio		0.82	0.77			0.75	0.69		0.13	0.12	1.00	
v/c Ratio		0.50	0.24			0.09	0.42		0.10	0.12	0.01	
Control Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.2	6.0			4.7	10.9		38.3	40.7	0.0	
LOS		A	A			A	B		D	D	A	
Approach Delay (s/veh)			6.2				10.7			30.2		
Approach LOS			A				B			C		
Queue Length 50th (ft)		23	65			4	134		11	19	0	
Queue Length 95th (ft)		75	134			18	319		27	41	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		551	3911			631	2447		247	775	1592	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.42	0.24			0.06	0.42		0.06	0.04	0.01	

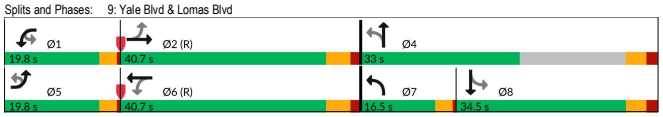
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	10.1	111.5
Actuated g/C Ratio	0.09	1.00
v/c Ratio	0.45	0.08
Control Delay (s/veh)	57.8	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	57.8	0.1
LOS	E	A
Approach Delay (s/veh)	18.4	
Approach LOS	B	
Queue Length 50th (ft)	43	0
Queue Length 95th (ft)	85	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	399	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.16	0.08

Intersection Summary

Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



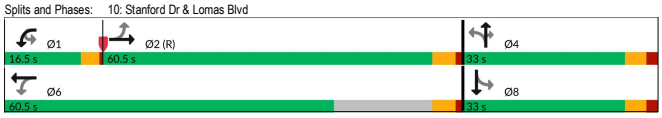
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Future Volume (vph)	2	651	221	16	67	940	4	80	0	43	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	127		0		270		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			0.98	1.00			0.99	0.98		0.99
Frt		0.962				0.999				0.850		0.925
Flt Protected	0.950				0.950				0.950			0.978
Satd. Flow (prot)	1805	4967	0	0	1791	3605	0	0	1805	1615	0	1702
Flt Permitted	0.285				0.277				0.752			0.866
Satd. Flow (perm)	540	4967	0	0	512	3605	0	0	1415	1575	0	1505
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		112				1				55		55
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1200				1515			171			91
Travel Time (s)		23.4				29.5			3.9			2.1
Confl. Peds. (#/hr)	4		4	32	32		32	9		9	4	
Confl. Bikes (#/hr)			1				13			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	693	235	17	71	1000	4	85	0	46	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	928	0	0	88	1004	0	0	85	46	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1	1	1	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	37	100		20	34	34	20	0
Trailing Detector (ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Position(ft)	0	0		0	2	0		0	8	8	0	0
Detector 1 Size(ft)	36	100		20	35	100		20	26	26	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm	NA
Protected Phases		2			1	6			4			8
Permitted Phases	2			1	6			4		4	8	
Detector Phase	2	2		1	1	6		4	4	4	8	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	5
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0			3.5	5.0			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0				10.0		25.0	25.0	25.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	83.6	83.6			91.6	91.1			12.1	12.1		12.1
Actuated g/C Ratio	0.76	0.76			0.83	0.83			0.11	0.11		0.11
v/c Ratio	0.00	0.24			0.18	0.34			0.55	0.21		0.04
Control Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	6.0	4.9			2.8	3.0			59.0	11.2		0.4
LOS	A	A			A	A			E	B		A
Approach Delay (s/veh)		4.9				3.0			42.2			0.4
Approach LOS		A				A			D			A
Queue Length 50th (ft)	0	63			6	74			58	0		0
Queue Length 95th (ft)	3	100			19	90			105	27		0
Internal Link Dist (ft)		1120				1435			91			11
Turn Bay Length (ft)	127				270							
Base Capacity (vph)	410	3803			577	2987			353	435		417
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.00	0.24			0.15	0.34			0.24	0.11		0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	211	14	2	15	213	7	12	140	10	18	145
Future Volume (vph)	24	211	14	2	15	213	7	12	140	10	18	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0		130		0	85		0	165	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00						1.00	1.00		0.99	1.00
Frt		0.991				0.996			0.990			0.987
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	1877	0	0	1805	1892	0	1805	1878	0	1805	1869
Flt Permitted	0.950				0.727			0.451			0.479	
Satd. Flow (perm)	1765	1877	0	0	1381	1892	0	854	1878	0	901	1869
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				2			3			4
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1368				928			688			3147
Travel Time (s)		26.6				18.1			15.6			71.5
Confl. Peds. (#/hr)	9		9					2		2	7	
Confl. Bikes (#/hr)										2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	224	15	2	16	227	7	13	149	11	19	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	239	0	0	18	234	0	13	160	0	19	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		35	35		37	37
Trailing Detector (ft)	2	0		0	1	0		2	2		2	2
Detector 1 Position(ft)	2	0		0	1	0		2	2		2	2
Detector 1 Size(ft)	34	100		20	35	100		33	33		35	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8

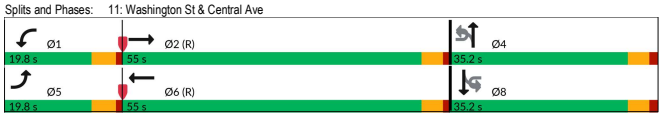
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	14
Future Volume (vph)	14
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	7
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	15
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0	12.0
Minimum Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (s)	19.8	55.0		35.2	19.8	55.0		35.2	35.2		35.2	35.2
Total Split (%)	18.0%	50.0%		32.0%	18.0%	50.0%		32.0%	32.0%		32.0%	32.0%
Maximum Green (s)	14.8	50.5		30.2	14.8	50.5		30.2	30.2		30.2	30.2
Yellow Time (s)	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			5.0	4.5		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0		22.0		9.0		23.0	23.0		22.0	22.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	7.1	77.4			9.8	77.1		15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.06	0.70			0.09	0.70		0.14	0.14		0.14	0.14
v/c Ratio	0.22	0.18			0.15	0.18		0.11	0.60		0.15	0.63
Control Delay (s/veh)	42.9	13.7			46.5	7.5		41.2	52.4		31.2	42.3
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	42.9	13.7			46.5	7.5		41.2	52.4		31.2	42.3
LOS	D	B			D	A		D	D		C	D
Approach Delay (s/veh)		16.5				10.3			51.5			41.2
Approach LOS		B				B			D			D
Queue Length 50th (ft)	18	25			12	56		8	106		12	119
Queue Length 95th (ft)	44	193			33	110		26	166		32	182
Internal Link Dist (ft)		1288				848			608			3067
Turn Bay Length (ft)	130				130			85			165	
Base Capacity (vph)	242	1322			187	1327		234	517		247	516
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.11	0.18			0.10	0.18		0.06	0.31		0.08	0.33

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay (s/veh): 26.9 Intersection LOS: C
Intersection Capacity Utilization 44.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

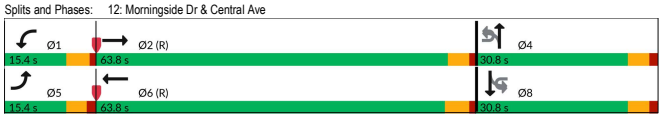
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	8	212	3	1	2	242	1	11	27	7	1
Future Volume (vph)	3	8	212	3	1	2	242	1	11	27	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.998				0.999			0.980		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1805	1895	0	0	1805	1898	0	0	1832	0	0
Flt Permitted										0.936		
Satd. Flow (perm)	0	1878	1895	0	0	1886	1898	0	0	1734	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1							7		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	5	5		5	3	3		3	4		4	8
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	9	226	3	1	2	257	1	12	29	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	229	0	0	3	258	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	32	14
Future Volume (vph)	32	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.959	
Flt Protected	0.999	
Satd. Flow (prot)	1800	0
Flt Permitted	0.993	
Satd. Flow (perm)	1789	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	34	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	50	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	59.3		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.7	93.0			6.2	92.0			8.1		
Actuated g/C Ratio		0.07	0.85			0.06	0.84			0.07		
v/c Ratio		0.09	0.14			0.03	0.16			0.36		
Control Delay (s/veh)		44.9	2.3			50.0	2.8			49.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		44.9	2.3			50.0	2.8			49.7		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			4.4				3.3			49.7		
Approach LOS			A				A			D		
Queue Length 50th (ft)		9	27			2	22			28		
Queue Length 95th (ft)		m30	46			m12	70			65		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		178	1602			178	1586			412		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.07	0.14			0.02	0.16			0.12		

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 10.7		Intersection LOS: B	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.34	
Control Delay (s/veh)	42.7	
Queue Delay	0.0	
Total Delay (s/veh)	42.7	
LOS	D	
Approach Delay (s/veh)	42.7	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	431	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	

Intersection Summary

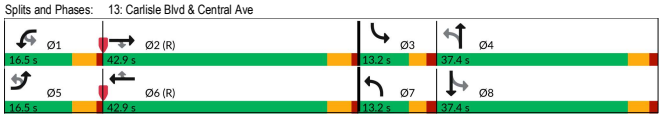
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	33	178	24	3	38	229	13	22	164	10	33
Future Volume (vph)	2	33	178	24	3	38	229	13	22	164	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97		0.99		0.97	0.99	1.00		0.98
Frt				0.850				0.850		0.991		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1879	0	1805
Flt Permitted		0.435				0.331			0.421			0.408
Satd. Flow (perm)	0	817	1900	1561	0	625	1900	1574	793	1879	0	761
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				114				114		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	4	4		4	2	2		2	7		7	13
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	35	189	26	3	40	244	14	23	174	11	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	189	26	0	43	244	14	23	185	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	195	12
Future Volume (vph)	195	12
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	1.00	
Frt	0.991	
Flt Protected		
Satd. Flow (prot)	1878	0
Flt Permitted		
Satd. Flow (perm)	1878	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	207	13
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (s)	16.5	16.5	42.9	42.9	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	15.0%	15.0%	39.0%	39.0%	15.0%	15.0%	39.0%	39.0%	12.0%	34.0%		12.0%
Maximum Green (s)	11.5	11.5	37.9	37.9	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		12.2	59.2	59.2		13.4	63.1	63.1	22.1	17.3		23.7
Actuated g/C Ratio		0.11	0.54	0.54		0.12	0.57	0.57	0.20	0.16		0.22
v/c Ratio		0.41	0.18	0.03		0.57	0.22	0.01	0.11	0.62		0.15
Control Delay (s/veh)		64.5	16.0	0.2		73.9	22.4	0.5	29.0	51.2		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		64.5	16.0	0.2		73.9	22.4	0.5	29.0	51.2		30.0
LOS		E	B	A		E	C	A	C	D		C
Approach Delay (s/veh)			21.5				28.7			48.8		
Approach LOS			C				C			D		
Queue Length 50th (ft)		22	77	1		30	78	0	12	123		19
Queue Length 95th (ft)		65	92	1		70	204	2	29	183		40
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		102	1023	893		83	1090	952	245	555		247
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		0.36	0.18	0.03		0.52	0.22	0.01	0.09	0.33		0.14

Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay (s/veh): 35.6 Intersection LOS: D
Intersection Capacity Utilization 55.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	37.4	
Total Split (s)	37.4	
Total Split (%)	34.0%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	19.9	
Actuated g/C Ratio	0.18	
v/c Ratio	0.64	
Control Delay (s/veh)	49.5	
Queue Delay	0.0	
Total Delay (s/veh)	49.5	
LOS	D	
Approach Delay (s/veh)	46.8	
Approach LOS	D	
Queue Length 50th (ft)	130	
Queue Length 95th (ft)	214	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	555	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.40	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	2	216	7	3	8	243	1	4	11	6	10
Future Volume (vph)	6	2	216	7	3	8	243	1	4	11	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.99		
Frt			0.996				0.999			0.963		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1891	0	0	1805	1898	0	0	1796	0	0
Flt Permitted										0.931		
Satd. Flow (perm)	0	1876	1891	0	0	1900	1898	0	0	1684	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2							6		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	4	4		4					5		5	14
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	2	230	7	3	9	259	1	4	12	6	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	237	0	0	12	260	0	0	22	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	7	2
Future Volume (vph)	7	2
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.986	
Flt Protected	0.973	
Satd. Flow (prot)	1813	0
Flt Permitted	0.939	
Satd. Flow (perm)	1724	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	2	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	7	2
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (s)	15.4	15.4	61.6		15.4	15.4	61.6		33.0	33.0		33.0
Total Split (%)	14.0%	14.0%	56.0%		14.0%	14.0%	56.0%		30.0%	30.0%		30.0%
Maximum Green (s)	10.9	10.9	56.6		10.9	10.9	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.0	99.6			7.6	99.8			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.07	0.14			0.09	0.15			0.17		
Control Delay (s/veh)		52.8	1.8			46.3	1.5			41.4		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		52.8	1.8			46.3	1.5			41.4		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.5				3.5			41.4		
Approach LOS			A				A			D		
Queue Length 50th (ft)		6	0			7	0			11		
Queue Length 95th (ft)		25	45			m29	27			36		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		185	1711			188	1721			433		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.04	0.14			0.06	0.15			0.05		

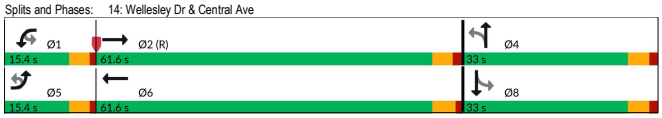
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.17	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.16	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.1	
Approach LOS	D	
Queue Length 50th (ft)	12	
Queue Length 95th (ft)	37	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	440	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	
Intersection Summary		

Intersection Signal Delay (s/veh): 6.5	Intersection LOS: A
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	3	223	12	1	8	229	7	3	16	4	2
Future Volume (vph)	2	3	223	12	1	8	229	7	3	16	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			0.99	1.00			0.99		
Frt			0.992				0.996			0.977		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1805	1883	0	0	1805	1891	0	0	1832	0	0
Flt Permitted										0.953		
Satd. Flow (perm)	0	1900	1883	0	0	1887	1891	0	0	1755	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			4		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)					2	2		2	7		7	5
Confl. Bikes (#/hr)				1				1			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	3	237	13	1	9	244	7	3	17	4	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	250	0	0	10	251	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	3
Future Volume (vph)	9	3
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.973	
Flt Protected	0.993	
Satd. Flow (prot)	1829	0
Flt Permitted	0.948	
Satd. Flow (perm)	1743	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	10	3
Shared Lane Traffic (%)		
Lane Group Flow (vph)	15	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (s)	30.8	15.4	63.8		30.8	15.4	63.8		30.8	30.8		30.8
Total Split (%)	28.0%	14.0%	58.0%		28.0%	14.0%	58.0%		28.0%	28.0%		28.0%
Maximum Green (s)	25.8	10.4	58.8		25.8	10.4	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		6.6	99.6			7.3	100.0			8.1		
Actuated g/C Ratio		0.06	0.91			0.07	0.91			0.07		
v/c Ratio		0.04	0.15			0.08	0.15			0.18		
Control Delay (s/veh)		48.6	2.5			49.4	0.4			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		48.6	2.5			49.4	0.4			45.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			3.4				2.2			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		3	0			6	0			14		
Queue Length 95th (ft)		15	85			27	6			40		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		179	1705			178	1719			414		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.03	0.15			0.06	0.15			0.06		

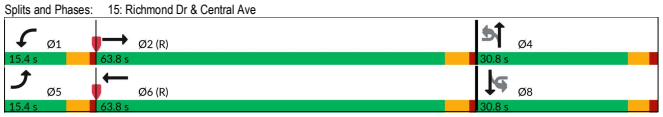
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	28.0%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.07	
v/c Ratio	0.11	
Control Delay (s/veh)	43.1	
Queue Delay	0.0	
Total Delay (s/veh)	43.1	
LOS	D	
Approach Delay (s/veh)	43.1	
Approach LOS	D	
Queue Length 50th (ft)	8	
Queue Length 95th (ft)	29	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	411	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	

Intersection Summary

Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	26	308	14	3	12	300	28	3	9	9	12
Future Volume (vph)	6	26	308	14	3	12	300	28	3	9	9	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.99		
Frt			0.993				0.987			0.941		
Flt Protected		0.950				0.950				0.994		
Satd. Flow (prot)	0	1747	3577	0	0	1805	3554	0	0	1759	0	0
Flt Permitted		0.851								0.948		
Satd. Flow (perm)	0	1530	3577	0	0	1886	3554	0	0	1676	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				14			10		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	12	12		12	4	4		4	13		13	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	28	328	15	3	13	319	30	3	10	10	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	343	0	0	16	349	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	15
Future Volume (vph)	3	15
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.980	
Satd. Flow (prot)	1721	0
Flt Permitted	0.857	
Satd. Flow (perm)	1504	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	16	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	16
Shared Lane Traffic (%)		
Lane Group Flow (vph)	32	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

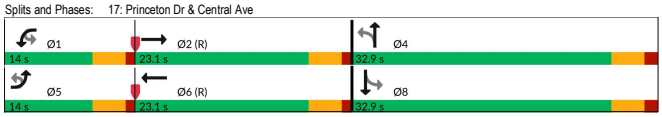
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		33.0	33.0		33.0
Total Split (s)	14.0	14.0	23.1		14.0	14.0	23.1		32.9	32.9		32.9
Total Split (%)	20.0%	20.0%	33.0%		20.0%	20.0%	33.0%		47.0%	47.0%		47.0%
Maximum Green (s)	9.5	9.5	18.6		9.5	9.5	18.6		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		8.8	60.1			7.2	56.4			8.1		
Actuated g/C Ratio		0.13	0.86			0.10	0.81			0.12		
v/c Ratio		0.18	0.11			0.08	0.12			0.11		
Control Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		27.8	3.2			28.1	5.1			22.0		
LOS		C	A			C	A			C		
Approach Delay (s/veh)			5.4				6.1			22.0		
Approach LOS			A				A			C		
Queue Length 50th (ft)		13	0			6	0			5		
Queue Length 95th (ft)		35	55			22	62			25		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		227	3070			257	2867			674		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.15	0.11			0.06	0.12			0.03		

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.18	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	32.9	
Total Split (%)	47.0%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.1	
Actuated g/C Ratio	0.12	
v/c Ratio	0.17	
Control Delay (s/veh)	21.0	
Queue Delay	0.0	
Total Delay (s/veh)	21.0	
LOS	C	
Approach Delay (s/veh)	21.0	
Approach LOS	C	
Queue Length 50th (ft)	6	
Queue Length 95th (ft)	30	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	609	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.05	

Intersection Summary			
Intersection Signal Delay (s/veh): 6.8		Intersection LOS: A	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	17	332	5	11	5	318	5	2	7	15	6
Future Volume (vph)	1	17	332	5	11	5	318	5	2	7	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.99	1.00			0.98		1.00
Frt			0.998				0.998			0.914		
Flt Protected		0.950				0.950				0.996		0.950
Satd. Flow (prot)	0	1805	3603	0	0	1805	3602	0	0	1685	0	1805
Flt Permitted										0.970		
Satd. Flow (perm)	0	1900	3603	0	0	1873	3602	0	0	1639	0	1899
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				2			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					7	7		7	24		24	1
Confl. Bikes (#/hr)								4			4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	1	18	353	5	12	5	338	5	2	7	16	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	358	0	0	17	343	0	0	25	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1	5
Future Volume (vph)	1	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.875	
Flt Protected		
Satd. Flow (prot)	1645	0
Flt Permitted		
Satd. Flow (perm)	1645	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	1	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	6	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	28.7	13.3	28.0		28.7	13.3	28.0		28.7	28.7		28.7
Total Split (s)	28.7	13.3	28.0		28.7	13.3	28.7		28.7	28.7		28.7
Total Split (%)	40.6%	18.8%	39.6%		40.6%	18.8%	40.6%		40.6%	40.6%		40.6%
Maximum Green (s)	23.7	8.3	23.5		24.2	8.8	23.7		23.7	23.7		24.2
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		7.2	60.8			7.1	60.5			8.0		8.2
Actuated g/C Ratio		0.10	0.86			0.10	0.86			0.11		0.12
v/c Ratio		0.10	0.12			0.09	0.11			0.13		0.03
Control Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
Queue Delay		0.0	0.0			0.0	0.0			0.0		0.0
Total Delay (s/veh)		28.8	3.1			28.7	3.3			19.3		28.0
LOS		C	A			C	A			B		C
Approach Delay (s/veh)			4.4				4.5			19.3		
Approach LOS			A				A			B		
Queue Length 50th (ft)		8	0			7	0			4		2
Queue Length 95th (ft)		25	57			23	57			25		13
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		231	3101			238	3084			560		650
Starvation Cap Reductn		0	0			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.08	0.12			0.07	0.11			0.04		0.01

Intersection Summary

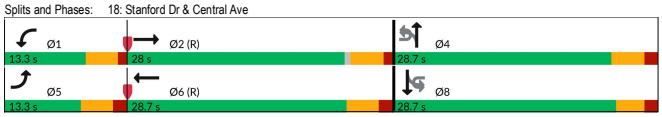
Area Type: Other
Cycle Length: 70.7
Actuated Cycle Length: 70.7
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.13

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	28.7	
Total Split (s)	28.7	
Total Split (%)	40.6%	
Maximum Green (s)	24.2	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.12	
v/c Ratio	0.03	
Control Delay (s/veh)	19.5	
Queue Delay	0.0	
Total Delay (s/veh)	19.5	
LOS	B	
Approach Delay (s/veh)	23.8	
Approach LOS	C	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	11	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	566	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

Intersection Signal Delay (s/veh): 5.3	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



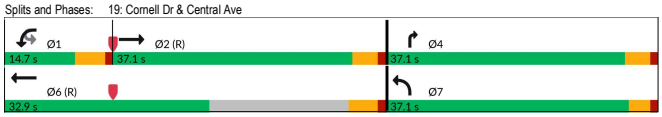
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	346	31	2	26	297	20	12
Future Volume (vph)	346	31	2	26	297	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99			0.97		0.97	
Frt	0.988						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3525	0	0	1740	3610	1805	1615
Flt Permitted				0.816		0.950	
Satd. Flow (perm)	3525	0	0	1447	3610	1751	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						13
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		34	15	15		37	37
Confl. Bikes (#/hr)		4					5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	4%	0%	0%	0%
Adj. Flow (vph)	368	33	2	28	316	21	13
Shared Lane Traffic (%)							
Lane Group Flow (vph)	401	0	0	30	316	21	13
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	18.2		14.7	14.7	32.9	37.1	37.1
Total Split (s)	37.1		14.7	14.7	32.9	37.1	37.1
Total Split (%)	41.7%		16.5%	16.5%	37.0%	41.7%	41.7%
Maximum Green (s)	32.6		9.7	9.7	27.9	33.1	32.6
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	75.5			9.0	82.2	6.6	8.0
Actuated g/C Ratio	0.85			0.10	0.92	0.07	0.09
v/c Ratio	0.13			0.21	0.09	0.16	0.08
Control Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9			38.2	1.0	40.6	19.9
LOS	A			D	A	D	B
Approach Delay (s/veh)	3.9				4.2	32.7	
Approach LOS	A				A	C	
Queue Length 50th (ft)	0			16	0	11	0
Queue Length 95th (ft)	69			40	22	33	18
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2994			174	3337	672	600
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.13			0.17	0.09	0.03	0.02

Intersection Summary	
Area Type:	Other
Cycle Length: 88.9	
Actuated Cycle Length: 88.9	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Intersection Signal Delay (s/veh): 5.3	Intersection LOS: A
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	11	281	69	45	271	6	73	19	61	7	12
Future Volume (vph)	1	11	281	69	45	271	6	73	19	61	7	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0	120		0	80		80	0	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.99		0.99	1.00				0.99	1.00	0.99
Frt			0.971			0.997				0.850		0.947
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3483	0	1805	3596	0	1787	1900	1615	1805	1787
Flt Permitted		0.909			0.950			0.432			0.744	
Satd. Flow (perm)	0	1711	3483	0	1781	3596	0	813	1900	1593	1408	1787
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			24			2				132		7
Link Speed (mph)			30			30			25			25
Link Distance (ft)			1412			750			1232			105
Travel Time (s)			32.1			17.0			33.6			2.9
Confl. Peds. (#/hr)	3	3		3	7		7				3	
Confl. Bikes (#/hr)				3			2			2		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	12	299	73	48	288	6	78	20	65	7	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	372	0	48	294	0	78	20	65	7	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1	1	1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	36	100		36	100		30	30	30	35	35
Trailing Detector (ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Position(ft)	0	1	0		2	0		3	3	3	3	3
Detector 1 Size(ft)	20	35	6		34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	7
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5							4		4	8	
Detector Phase	5	5	2		1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	12.0		4.0	8.0	8.0	4.0	8.0
Minimum Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (s)	15.4	15.4	56.0		28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	11.0%	40.0%		20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	C-Max		None	None	None	None	None
Walk Time (s)			7.0			7.0			7.0	7.0		7.0
Flash Don't Walk (s)			15.0			16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)			0			0			0	0		0
Act Effct Green (s)		8.3	98.7		9.1	104.2		19.4	17.0	17.0	10.9	8.1
Actuated g/C Ratio		0.06	0.71		0.07	0.74		0.14	0.12	0.12	0.08	0.06
v/c Ratio		0.13	0.15		0.41	0.11		0.41	0.09	0.21	0.06	0.18
Control Delay (s/veh)		55.0	6.5		72.4	7.2		57.7	52.8	1.5	47.1	50.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.0	6.5		72.4	7.2		57.7	52.8	1.5	47.1	50.5
LOS		D	A		E	A		E	D	A	D	D
Approach Delay (s/veh)			8.2			16.4			34.7			49.6
Approach LOS			A			B			C			D
Queue Length 50th (ft)		10	66		43	33		62	15	0	5	11
Queue Length 95th (ft)		m28	88		85	80		109	43	0	19	39
Internal Link Dist (ft)			1332			670			1152			25
Turn Bay Length (ft)		160			120			80		80		
Base Capacity (vph)		131	2461		296	2677		240	483	503	183	388
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.10	0.15		0.16	0.11		0.33	0.04	0.13	0.04	0.05

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.41

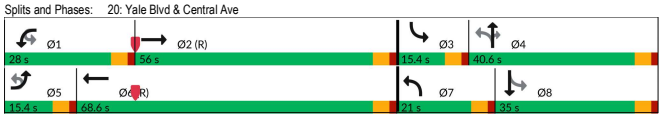
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Future Volume (vph)	1	26	218	19	4	34	202	120	27	372	42	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		0.99	1.00			0.96	0.98		0.98	1.00		0.99
Frt			0.988				0.944			0.985		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1874	0	0	1805	3330	0	1805	5095	0	1805
Flt Permitted		0.348				0.221			0.530			0.247
Satd. Flow (perm)	0	656	1874	0	0	403	3330	0	991	5095	0	467
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				95			13		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	6	6		6	29	29		29	10		10	8
Confl. Bikes (#/hr)								1			2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	1	28	232	20	4	36	215	128	29	396	45	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	252	0	0	40	343	0	29	441	0	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	290	46
Future Volume (vph)	290	46
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5049	0
Flt Permitted		
Satd. Flow (perm)	5049	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	21	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	309	49
Shared Lane Traffic (%)		
Lane Group Flow (vph)	358	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

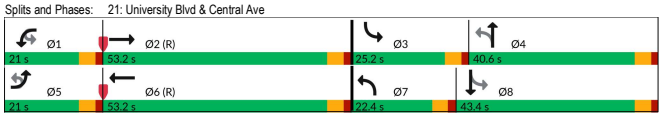
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	40.6		25.2
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	29.0%		18.0%
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	35.6		20.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		14.8	72.8			19.9	80.5		24.3	17.1		35.1
Actuated g/C Ratio		0.11	0.52			0.14	0.58		0.17	0.12		0.25
v/c Ratio		0.42	0.26			0.70	0.18		0.14	0.69		0.49
Control Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		73.8	23.2			121.7	10.4		39.2	63.0		47.6
LOS		E	C			F	B		D	E		D
Approach Delay (s/veh)			28.4				22.0			61.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		25	130			37	19		20	139		86
Queue Length 95th (ft)		57	237			81	73		44	174		131
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		84	976			61	1954		338	1305		310
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.35	0.26			0.66	0.18		0.09	0.34		0.38

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	43.4	
Total Split (s)	43.4	
Total Split (%)	31.0%	
Maximum Green (s)	38.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.3	
Actuated g/C Ratio	0.20	
v/c Ratio	0.36	
Control Delay (s/veh)	47.1	
Queue Delay	0.0	
Total Delay (s/veh)	47.1	
LOS	D	
Approach Delay (s/veh)	47.2	
Approach LOS	D	
Queue Length 50th (ft)	102	
Queue Length 95th (ft)	130	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1400	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.26	
Intersection Summary		

Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Future Volume (vph)	3	0	234	249	6	56	226	0	73	0	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93		0.95		0.99			0.97		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.610				0.564			0.950			
Satd. Flow (perm)	0	1081	1900	1538	0	1061	1900	0	1743	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				265							763	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	20	20		20	4	4		4	10		10	10
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	249	265	6	60	240	0	78	0	35	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	249	265	0	66	240	0	78	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	39.6	39.6	15.3	15.3	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	15.3	15.3	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	14.9%	14.9%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	10.3	10.3	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		75.8	72.9	72.9		80.2	80.1		14.0		102.6	
Actuated g/C Ratio		0.74	0.71	0.71		0.78	0.78		0.14		1.00	
v/c Ratio		0.00	0.18	0.23		0.08	0.16		0.32		0.02	
Control Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	7.5	1.4		3.6	4.7		42.4		0.0	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			4.4				4.5			29.3		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	61	0		10	37		46		0	
Queue Length 95th (ft)		3	99	28		20	90		90		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		974	1351	1170		909	1483		529		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.18	0.23		0.07	0.16		0.15		0.02	

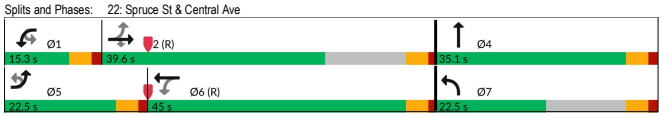
Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	71	318	18	7	330	24	29	57	9	19	44
Future Volume (vph)	2	71	318	18	7	330	24	29	57	9	19	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		100	100		0	100		0	100	
Storage Lanes		1		1	0		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.990			0.979			0.921
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3567	0	1805	1856	0	1805	1734
Flt Permitted		0.499			0.548			0.693			0.711	
Satd. Flow (perm)	0	941	3610	1568	1037	3567	0	1314	1856	0	1350	1734
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		10			10			52
Link Speed (mph)			30			30			30			30
Link Distance (ft)			309			351			319			327
Travel Time (s)			7.0			8.0			7.3			7.4
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	76	338	19	7	351	26	31	61	10	20	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	78	338	19	7	377	0	31	71	0	20	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	49
Future Volume (vph)	49
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.5	22.5	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	26.1%	26.1%	39.2%	39.2%	13.0%	39.2%		34.8%	34.8%		34.8%	34.8%
Maximum Green (s)	19.0	19.0	29.3	29.3	7.7	29.3		24.5	24.5		24.5	24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	4.5	4.5	3.5	4.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None		None	None
Walk Time (s)	7.0	7.0	7.0	7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)	11.0	11.0	15.0	15.0		10.0		30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)	0	0	0	0		0		0	0		0	0
Act Effct Green (s)		70.6	69.2	69.2	66.9	63.5		9.1	9.1		9.1	9.1
Actuated g/C Ratio		0.82	0.80	0.80	0.78	0.74		0.11	0.11		0.11	0.11
v/c Ratio		0.09	0.12	0.01	0.01	0.14		0.22	0.35		0.14	0.43
Control Delay (s/veh)		2.5	3.1	0.0	2.4	4.9		38.7	35.9		36.5	25.1
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	3.1	0.0	2.4	4.9		38.7	35.9		36.5	25.1
LOS		A	A	A	A	A		D	D		D	C
Approach Delay (s/veh)			2.9			4.9			36.7			27.0
Approach LOS			A			A			D			C
Queue Length 50th (ft)		6	16	0	1	31		16	32		10	24
Queue Length 95th (ft)		18	47	0	3	56		41	69		30	68
Internal Link Dist (ft)			229			271			239			247
Turn Bay Length (ft)		100		100	100			100			100	
Base Capacity (vph)		962	2894	1272	907	2629		373	534		383	529
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.12	0.01	0.01	0.14		0.08	0.13		0.05	0.19

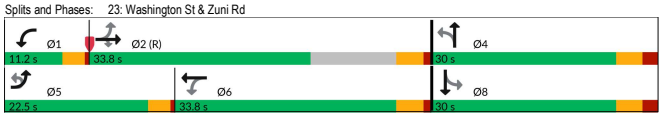
Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 9.7 Intersection LOS: A
Intersection Capacity Utilization 43.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 23: Washington St & Zuni Rd

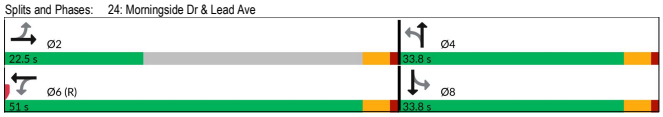


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	220	1	1	221	3	5	12	5	19	11	19
Future Volume (vph)	3	220	1	1	221	3	5	12	5	19	11	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt		0.999			0.998			0.971			0.948	
Flt Protected		0.999						0.989			0.981	
Satd. Flow (prot)	0	1896	0	0	1896	0	0	1816	0	0	1749	0
Flt Permitted		0.998			0.999			0.968			0.923	
Satd. Flow (perm)	0	1894	0	0	1894	0	0	1777	0	0	1642	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			5			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		363			176			60			347	
Travel Time (s)		8.3			4.0			1.4			7.9	
Confl. Peds. (#/hr)										2		2
Confl. Bikes (#/hr)						2			2			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	234	1	1	235	3	5	13	5	20	12	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	238	0	0	239	0	0	23	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		51.0	51.0		33.8	33.8		33.8	33.8	
Total Split (%)	26.5%	26.5%		60.1%	60.1%		39.9%	39.9%		39.9%	39.9%	
Maximum Green (s)	18.0	18.0		46.5	46.5		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		46.5			46.5			29.3			29.3	
Actuated g/C Ratio		0.55			0.55			0.35			0.35	
v/c Ratio		0.23			0.23			0.04			0.09	
Control Delay (s/veh)		10.6			10.6			15.9			13.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		10.6			10.6			15.9			13.6	
LOS		B			B			B			B	
Approach Delay (s/veh)		10.6			10.6			15.9			13.6	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		61			61			6			11	
Queue Length 95th (ft)		101			101			22			35	
Internal Link Dist (ft)		283			96			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1038			1039			617			580	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.23			0.23			0.04			0.09	

Intersection Summary
Area Type: Other
Cycle Length: 84.8
Actuated Cycle Length: 84.8
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.23
Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 35.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 24: Morningside Dr & Lead Ave



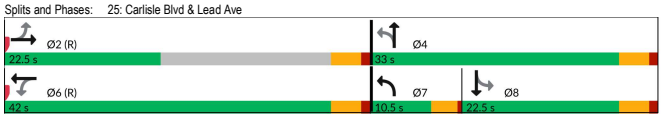
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	234	16	17	234	9	43	149	44	18	161	18
Future Volume (vph)	8	234	16	17	234	9	43	149	44	18	161	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99				
Frt		0.992			0.995			0.966			0.988	
Flt Protected		0.998			0.997		0.950				0.995	
Satd. Flow (prot)	0	1881	0	0	1883	0	1805	1825	0	0	1868	0
Flt Permitted		0.990			0.976		0.339				0.956	
Satd. Flow (perm)	0	1866	0	0	1844	0	644	1825	0	0	1795	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			4			23			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Bikes (#/hr)						3			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	249	17	18	249	10	46	159	47	19	171	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	275	0	0	277	0	46	206	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		3.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (%)	30.0%	30.0%		56.0%	56.0%		14.0%	44.0%		30.0%	30.0%	
Maximum Green (s)	18.0	18.0		37.5	37.5		7.0	28.5		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5			4.5		3.5	4.5			4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		1.5	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0			10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		47.2			47.2		19.8	18.8			12.8	
Actuated g/C Ratio		0.63			0.63		0.26	0.25			0.17	
v/c Ratio		0.23			0.24		0.18	0.44			0.67	
Control Delay (s/veh)		8.4			8.5		13.4	21.6			38.5	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay (s/veh)		8.4			8.5		13.4	21.6			38.5	
LOS		A			A		B	C			D	
Approach Delay (s/veh)		8.4			8.5			20.1			38.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)		54			56		7	33			89	
Queue Length 95th (ft)		116			117		12	38			144	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)		1177			1162		277	707			435	
Starvation Cap Reductn		0			0		0	0			0	
Spillback Cap Reductn		0			0		0	0			0	
Storage Cap Reductn		0			0		0	0			0	
Reduced v/c Ratio		0.23			0.24		0.17	0.29			0.48	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay (s/veh): 17.6 Intersection LOS: B

Intersection Capacity Utilization 52.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	176	35	36	176	18	19	201	19	7	179	8
Future Volume (vph)	19	176	35	36	176	18	19	201	19	7	179	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00				
Frt		0.980			0.989			0.989			0.993	
Flt Protected		0.996			0.992			0.996		0.950		
Satd. Flow (prot)	0	1848	0	0	1861	0	0	1868	0	1805	1887	0
Flt Permitted		0.971			0.934			0.964		0.375		
Satd. Flow (perm)	0	1801	0	0	1752	0	0	1808	0	712	1887	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			8			7			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1	1		1			
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	187	37	38	187	19	20	214	20	7	190	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	244	0	0	244	0	0	254	0	7	199	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	10		10	10	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												

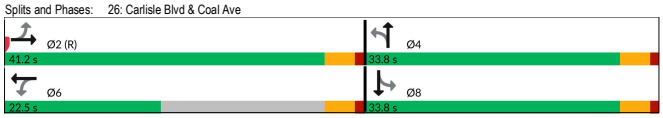
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		51.2			51.2			14.8		14.8	14.8	
Actuated g/C Ratio		0.68			0.68			0.20		0.20	0.20	
v/c Ratio		0.20			0.20			0.70		0.05	0.53	
Control Delay (s/veh)		5.3			5.5			37.4		40.4	49.6	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay (s/veh)		5.3			5.5			37.4		40.4	49.6	
LOS		A			A			D		D	D	
Approach Delay (s/veh)		5.3			5.5			37.4			49.2	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)		32			34			108		4	99	
Queue Length 95th (ft)		75			78			164		m8	165	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1235			1199			710		278	739	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.20			0.20			0.36		0.03	0.27	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	200	0	0	200	4	3	9	3	2	9	2
Future Volume (vph)	5	200	0	0	200	4	3	9	3	2	9	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998			0.975			0.981	
Flt Protected		0.999						0.991			0.993	
Satd. Flow (prot)	0	1898	0	0	1896	0	0	1836	0	0	1851	0
Flt Permitted		0.999						0.991			0.993	
Satd. Flow (perm)	0	1898	0	0	1896	0	0	1836	0	0	1851	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			734			657			532	
Travel Time (s)		31.0			16.7			14.9			12.1	
Confl. Peds. (#/hr)				1		1				1		1
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	213	0	0	213	4	3	10	3	2	10	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	218	0	0	217	0	0	16	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

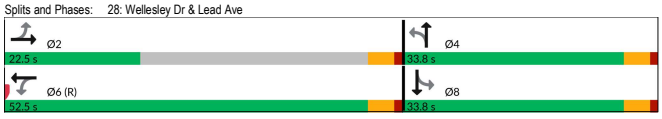
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.9%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	317	3	3	318	4	11	16	11	5	11	6
Future Volume (vph)	3	317	3	3	318	4	11	16	11	5	11	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99			0.99	
Frt		0.999			0.998			0.960			0.965	
Flt Protected		0.998			0.998			0.949			0.969	
Satd. Flow (prot)	0	1894	0	0	1891	0	0	1719	0	0	1757	0
Flt Permitted		0.998			0.998			0.949			0.969	
Satd. Flow (perm)	0	1894	0	0	1891	0	0	1719	0	0	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1			12			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				8		8				5		5
Confl. Bikes (#/hr)						7			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	337	3	3	338	4	12	17	12	5	12	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	343	0	0	345	0	0	41	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.33			0.33			0.07			0.04	
Control Delay (s/veh)		11.4			11.5			15.4			15.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		11.4			11.5			15.4			15.9	
LOS		B			B			B			B	
Approach Delay (s/veh)		11.4			11.5			15.4			15.9	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		94			94			10			6	
Queue Length 95th (ft)		146			147			32			22	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)		1053			1052			591			600	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.33			0.33			0.07			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 11.8		Intersection LOS: B	
Intersection Capacity Utilization	40.5%	ICU Level of Service A	
Analysis Period (min)	15		

Splits and Phases: 28: Wellesley Dr & Lead Ave

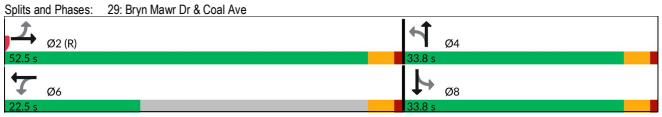


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	264	3	3	264	7	2	6	2	2	5	3
Future Volume (vph)	7	264	3	3	264	7	2	6	2	2	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.999			0.997			0.973			0.959	
Flt Protected		0.999			0.999			0.990			0.990	
Satd. Flow (prot)	0	1896	0	0	1892	0	0	1822	0	0	1804	0
Flt Permitted		0.993			0.998			0.980			0.980	
Satd. Flow (perm)	0	1884	0	0	1891	0	0	1804	0	0	1786	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			2			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Bikes (#/hr)			4						1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	281	3	3	281	7	2	6	2	2	5	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	291	0	0	291	0	0	10	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	52.5	52.5		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%		26.1%	26.1%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	
v/c Ratio		0.28			0.28			0.02			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		10.9			10.8			17.4			16.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		10.9			10.8			17.4			16.6	
LOS		B			B			B			B	
Approach Delay (s/veh)		10.9			10.8			17.4			16.6	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		77			77			3			3	
Queue Length 95th (ft)		123			122			14			13	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1048			1052			613			608	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.28			0.02			0.02	

Intersection Summary
Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.28
Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 32.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

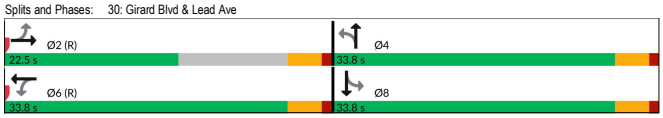


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	293	13	13	294	16	22	132	23	25	96	25
Future Volume (vph)	15	293	13	13	294	16	22	132	23	25	96	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			1.00	
Frt		0.994			0.993			0.983			0.977	
Flt Protected		0.998			0.998			0.994			0.991	
Satd. Flow (prot)	0	1885	0	0	1881	0	0	1851	0	0	1832	0
Flt Permitted		0.981			0.985			0.955			0.905	
Satd. Flow (perm)	0	1853	0	0	1856	0	0	1778	0	0	1673	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			5			14			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)							1		1			
Confl. Bikes (#/hr)						4			1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	312	14	14	313	17	23	140	24	27	102	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	342	0	0	344	0	0	187	0	0	156	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	
Total Split (%)	33.3%	33.3%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		29.3	29.3		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		47.1			47.1			11.5			11.5	
Actuated g/C Ratio		0.70			0.70			0.17			0.17	
v/c Ratio		0.26			0.27			0.60			0.52	
Control Delay (s/veh)		4.9			4.9			31.5			27.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		4.9			4.9			31.5			27.7	
LOS		A			A			C			C	
Approach Delay (s/veh)		4.9			4.9			31.5			27.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		41			41			67			52	
Queue Length 95th (ft)		93			92			115			95	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)		1292			1295			778			736	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.26			0.27			0.24			0.21	

Intersection Summary
Area Type: Other
Cycle Length: 67.6
Actuated Cycle Length: 67.6
Offset: 33.8 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay (s/veh): 13.2 Intersection LOS: B
Intersection Capacity Utilization 41.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 30: Girard Blvd & Lead Ave

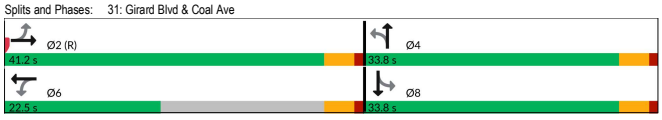


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	19	216	12	12	216	19	15	139	14	9	99	9
Future Volume (vph)	19	216	12	12	216	19	15	139	14	9	99	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993			0.990			0.989			0.989	
Flt Protected		0.996			0.998			0.996			0.996	
Satd. Flow (prot)	0	1877	0	0	1877	0	0	1868	0	0	1868	0
Flt Permitted		0.972			0.985			0.972			0.973	
Satd. Flow (perm)	0	1832	0	0	1853	0	0	1823	0	0	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			8			7			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			1									2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	230	13	13	230	20	16	148	15	10	105	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	263	0	0	263	0	0	179	0	0	125	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		54.2			54.2			11.8			11.8	
Actuated g/C Ratio		0.72			0.72			0.16			0.16	
v/c Ratio		0.20			0.20			0.61			0.43	
Control Delay (s/veh)		12.6			4.2			36.8			30.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		12.6			4.2			36.8			30.5	
LOS		B			A			D			C	
Approach Delay (s/veh)		12.6			4.2			36.8			30.5	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		79			30			76			50	
Queue Length 95th (ft)		172			68			126			91	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1324			1340			716			717	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.20			0.20			0.25			0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 17.8		Intersection LOS: B	
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



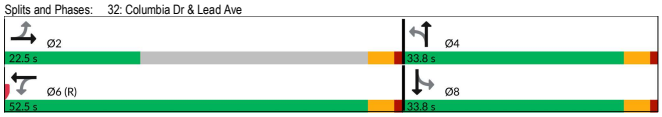
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	8	393	7	8	394	7	10	8	11	11	7	10
Future Volume (vph)	8	393	7	8	394	7	10	8	11	11	7	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99				
Frt		0.998			0.998			0.949			0.950	
Flt Protected		0.999			0.999			0.983			0.980	
Satd. Flow (prot)	0	1894	0	0	1894	0	0	1756	0	0	1769	0
Flt Permitted		0.991			0.991			0.941			0.931	
Satd. Flow (perm)	0	1879	0	0	1878	0	0	1681	0	0	1680	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2			12			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Bikes (#/hr)						5			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	418	7	9	419	7	11	9	12	12	7	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	434	0	0	435	0	0	32	0	0	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	
v/c Ratio		0.42			0.42			0.06			0.05	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		12.5			12.5			14.3			14.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		12.5			12.5			14.3			14.4	
LOS		B			B			B			B	
Approach Delay (s/veh)		12.5			12.5			14.3			14.4	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		126			126			7			7	
Queue Length 95th (ft)		192			193			26			25	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)		1045			1045			578			577	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.42			0.42			0.06			0.05	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.42
Intersection Signal Delay (s/veh): 12.6 Intersection LOS: B
Intersection Capacity Utilization 39.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 32: Columbia Dr & Lead Ave



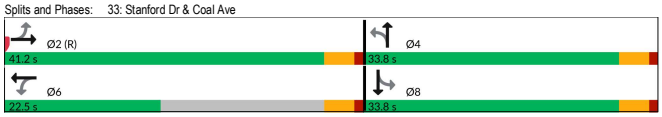
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	255	3	3	256	9	4	4	4	2	4	3
Future Volume (vph)	9	255	3	3	256	9	4	4	4	2	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.999			0.995			0.955			0.955	
Flt Protected		0.998			0.999			0.984			0.989	
Satd. Flow (prot)	0	1894	0	0	1887	0	0	1768	0	0	1780	0
Flt Permitted		0.988			0.998			0.963			0.979	
Satd. Flow (perm)	0	1875	0	0	1885	0	0	1725	0	0	1761	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			3			4			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2	2		2	4		4	1		1
Confl. Bikes (#/hr)			3						1			3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	271	3	3	272	10	4	4	4	2	4	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	0	0	285	0	0	12	0	0	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		36.7			36.7			29.3			29.3	
Actuated g/C Ratio		0.49			0.49			0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.31			0.31			0.02			0.01	
Control Delay (s/veh)		12.7			11.0			12.1			12.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		12.7			11.0			12.1			12.3	
LOS		B			B			B			B	
Approach Delay (s/veh)		12.7			11.0			12.1			12.3	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		75			62			2			2	
Queue Length 95th (ft)		124			96			12			10	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		918			923			676			689	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.31			0.31			0.02			0.01	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.31
Intersection Signal Delay (s/veh): 11.9 Intersection LOS: B
Intersection Capacity Utilization 40.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave



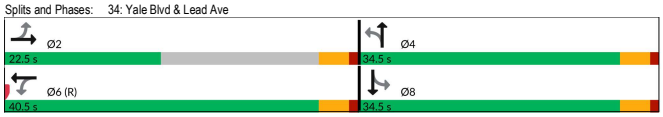
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	331	44	44	332	7	33	104	34	12	71	12
Future Volume (vph)	8	331	44	44	332	7	33	104	34	12	71	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.99	1.00		1.00	0.99			1.00	0.98
Frt		0.984			0.997			0.963				0.850
Flt Protected		0.999		0.950			0.950				0.993	
Satd. Flow (prot)	0	1861	0	1805	1892	0	1805	1819	0	0	1871	1615
Flt Permitted		0.993		0.543			0.699				0.941	
Satd. Flow (perm)	0	1850	0	1018	1892	0	1323	1819	0	0	1772	1582
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			2			26				87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	4		4	14		14	2		2	1		1
Confl. Bikes (#/hr)			3			6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	9	352	47	47	353	7	35	111	36	13	76	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	408	0	47	360	0	35	147	0	0	89	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	0	0
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	0	0
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		Free
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (%)	30.0%	30.0%		54.0%	54.0%		46.0%	46.0%		46.0%	46.0%	
Maximum Green (s)	18.0	18.0		36.0	36.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		55.1		55.1	55.1		10.9	10.9			10.9	75.0
Actuated g/C Ratio		0.73		0.73	0.73		0.15	0.15			0.15	1.00
v/c Ratio		0.30		0.06	0.26		0.18	0.52			0.35	0.01
Control Delay (s/veh)		4.3		3.6	4.2		29.1	30.2			31.7	0.0
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)		4.3		3.6	4.2		29.1	30.2			31.7	0.0
LOS		A		A	A		C	C			C	A
Approach Delay (s/veh)		4.3			4.1			30.0			27.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		47		5	41		15	53			38	0
Queue Length 95th (ft)		101		16	89		37	100			74	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)		1363		748	1391		529	743			708	1582
Starvation Cap Reductn		0		0	0		0	0			0	0
Spillback Cap Reductn		0		0	0		0	0			0	0
Storage Cap Reductn		0		0	0		0	0			0	0
Reduced v/c Ratio		0.30		0.06	0.26		0.07	0.20			0.13	0.01

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52

Intersection Signal Delay (s/veh): 10.7 Intersection LOS: B
Intersection Capacity Utilization 49.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 34: Yale Blvd & Lead Ave



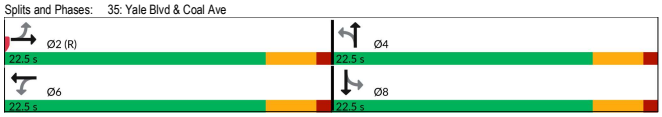
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	173	18	19	174	13	68	155	68	7	148	7
Future Volume (vph)	13	173	18	19	174	13	68	155	68	7	148	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00					1.00	1.00	
Frt		0.986			0.991			0.969			0.994	
Flt Protected	0.950				0.995			0.988		0.950		
Satd. Flow (prot)	1805	1869	0	0	1870	0	0	1819	0	1805	1887	0
Flt Permitted	0.693				0.970			0.883		0.530		
Satd. Flow (perm)	1317	1869	0	0	1822	0	0	1626	0	1005	1887	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			9			41			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)				7		7				2		2
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	184	19	20	185	14	72	165	72	7	157	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	203	0	0	219	0	0	309	0	7	164	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	23.2	23.2			23.2			12.8			12.8	12.8
Actuated g/C Ratio	0.52	0.52			0.52			0.28			0.28	0.28
v/c Ratio	0.02	0.21			0.23			0.63			0.02	0.30
Control Delay (s/veh)	7.4	7.5			7.8			17.4			9.6	12.4
Queue Delay	0.0	0.0			0.0			0.0			0.0	0.0
Total Delay (s/veh)	7.4	7.5			7.8			17.4			9.6	12.4
LOS	A	A			A			B			A	B
Approach Delay (s/veh)		7.4			7.8			17.4				12.3
Approach LOS		A			A			B				B
Queue Length 50th (ft)	2	23			26			59			1	32
Queue Length 95th (ft)	9	64			71			99			6	55
Internal Link Dist (ft)		507			310			465				814
Turn Bay Length (ft)	130										90	
Base Capacity (vph)	680	972			945			675			402	758
Starvation Cap Reductn	0	0			0			0			0	0
Spillback Cap Reductn	0	0			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.02	0.21			0.23			0.46			0.02	0.22

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 11.8	Intersection LOS: B
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 35: Yale Blvd & Coal Ave

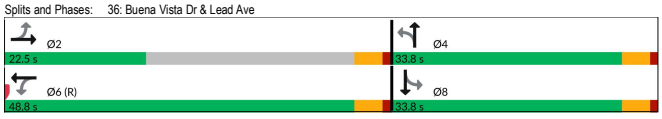


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	400	8	8	399	2	15	4	15	5	6	6
Future Volume (vph)	2	400	8	8	399	2	15	4	15	5	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99				
Frt		0.997			0.999			0.940			0.952	
Flt Protected					0.999			0.978			0.986	
Satd. Flow (prot)	0	1894	0	0	1896	0	0	1729	0	0	1783	0
Flt Permitted		0.999			0.991			0.921			0.961	
Satd. Flow (perm)	0	1892	0	0	1881	0	0	1628	0	0	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						16			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						7			3			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	426	9	9	424	2	16	4	16	5	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	437	0	0	435	0	0	36	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		48.8	48.8		33.8	33.8		33.8	33.8	
Total Split (%)	27.2%	27.2%		59.1%	59.1%		40.9%	40.9%		40.9%	40.9%	
Maximum Green (s)	18.0	18.0		44.3	44.3		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		44.3			44.3			29.3			29.3	
Actuated g/C Ratio		0.54			0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.43			0.43			0.06			0.03	
Control Delay (s/veh)		13.2			13.2			12.2			14.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		13.2			13.2			12.2			14.1	
LOS		B			B			B			B	
Approach Delay (s/veh)		13.2			13.2			12.2			14.1	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		127			127			7			4	
Queue Length 95th (ft)		196			196			26			17	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)		1015			1008			587			620	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.43			0.43			0.06			0.03	

Intersection Summary	
Area Type:	Other
Cycle Length: 82.6	
Actuated Cycle Length: 82.6	
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay (s/veh): 13.2	Intersection LOS: B
Intersection Capacity Utilization 40.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 36: Buena Vista Dr & Lead Ave

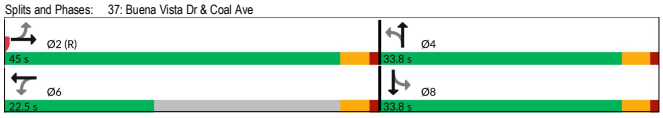


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	222	26	26	223	12	3	20	3	4	19	5
Future Volume (vph)	11	222	26	26	223	12	3	20	3	4	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			0.99	
Frt		0.986			0.994			0.985			0.977	
Flt Protected		0.998			0.995			0.994			0.993	
Satd. Flow (prot)	0	1863	0	0	1879	0	0	1855	0	0	1834	0
Flt Permitted		0.987			0.958			0.956			0.946	
Satd. Flow (perm)	0	1841	0	0	1809	0	0	1784	0	0	1745	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			5			3			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6				1		1	4		4
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	12	236	28	28	237	13	3	21	3	4	20	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	276	0	0	278	0	0	27	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	45.0	45.0		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%		28.6%	28.6%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		72.0			72.0			8.0			8.0	
Actuated g/C Ratio		0.91			0.91			0.10			0.10	
v/c Ratio		0.16			0.17			0.15			0.16	
Control Delay (s/veh)		1.4			1.5			31.8			30.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		1.4			1.5			31.8			30.6	
LOS		A			A			C			C	
Approach Delay (s/veh)		1.4			1.5			31.8			30.6	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		0			0			11			11	
Queue Length 95th (ft)		40			41			35			35	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1683			1653			665			651	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.16			0.17			0.04			0.04	

Intersection Summary
Area Type: Other
Cycle Length: 78.8
Actuated Cycle Length: 78.8
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.17
Intersection Signal Delay (s/veh): 4.2 Intersection LOS: A
Intersection Capacity Utilization 37.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 37: Buena Vista Dr & Coal Ave



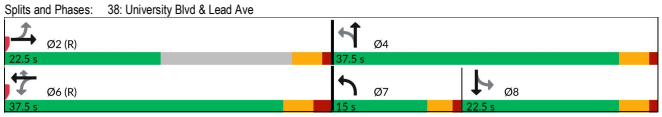
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	339	25	25	340	53	16	203	16	25	256	26
Future Volume (vph)	53	339	25	25	340	53	16	203	16	25	256	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130	125		0	100		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00			1.00	0.98		1.00				
Frt		0.992				0.850		0.989			0.986	
Flt Protected		0.994			0.997		0.950			0.950		
Satd. Flow (prot)	0	1871	0	0	1894	1615	1805	5122	0	1805	5114	0
Flt Permitted		0.905			0.955		0.498			0.601		
Satd. Flow (perm)	0	1703	0	0	1814	1589	946	5122	0	1142	5114	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				80		17			22	
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		2138			998			770			1118	
Travel Time (s)		48.6			22.7			17.5			19.1	
Confl. Peds. (#/hr)	6		6	2		2						
Confl. Bikes (#/hr)			1			5			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	56	361	27	27	362	56	17	216	17	27	272	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	444	0	0	389	56	17	233	0	27	300	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6		6	4			8		
Detector Phase	2	2		6	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0	8.0	3.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	37.5		22.5	22.5	
Total Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	37.5		22.5	22.5	
Total Split (%)	30.0%	30.0%		50.0%	50.0%	50.0%	20.0%	50.0%		30.0%	30.0%	
Maximum Green (s)	18.0	18.0		32.0	32.0	32.0	11.0	33.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.0	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		2.0	2.0	2.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			5.5	5.5	4.0	4.5		4.5	4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		23.0	23.0	23.0		10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0		0	0	
Act Effct Green (s)		33.0			32.0	32.0	33.5	33.0		31.2	31.2	
Actuated g/C Ratio		0.44			0.43	0.43	0.45	0.44		0.42	0.42	
v/c Ratio		0.59			0.50	0.08	0.04	0.10		0.06	0.14	
Control Delay (s/veh)		17.3			18.5	2.2	11.9	11.6		15.4	13.6	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)		17.3			18.5	2.2	11.9	11.6		15.4	13.6	
LOS		B			B	A	B	B		B	B	
Approach Delay (s/veh)		17.3			16.5			11.6			13.7	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		156			127	0	4	20		7	27	
Queue Length 95th (ft)		252			205	12	15	34		26	53	
Internal Link Dist (ft)		2058			918			690			1038	
Turn Bay Length (ft)						130	125			100		
Base Capacity (vph)		752			773	723	548	2263		474	2137	
Starvation Cap Reductn		0			0	0	0	0		0	0	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.59			0.50	0.08	0.03	0.10		0.06	0.14	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 15.3	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



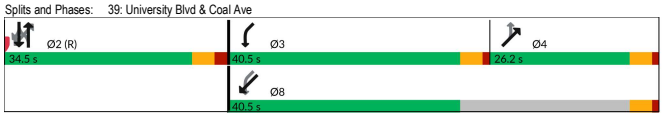
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	51	215	19	20	215	51	34	203	34	25	245	25
Future Volume (vph)	51	215	19	20	215	51	34	203	34	25	245	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		120	0		100	80		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Ped Bike Factor		1.00			1.00	0.98	0.97		0.97	1.00	1.00	
Frt		0.991				0.850			0.850		0.986	
Flt Protected		0.991			0.996		0.950			0.950		
Satd. Flow (prot)	0	1864	0	0	1892	1615	1805	3610	1615	1805	5103	0
Flt Permitted		0.794			0.957		0.568			0.571		
Satd. Flow (perm)	0	1493	0	0	1818	1586	1049	3610	1567	1083	5103	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				65			124		27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	4		4	2		2	18		18	1		1
Confl. Bikes (#/hr)						6			3			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	54	229	20	21	229	54	36	216	36	27	261	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	303	0	0	250	54	36	216	36	27	288	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		30	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		26	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Free	pm+pt	NA	
Protected Phases		2			2			4		3	8	
Permitted Phases	2			2		2	4		Free	8		
Detector Phase	2	2		2	2	2	4	4		3	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		3.0	8.0	
Minimum Split (s)	44.5	44.5		44.5	44.5	44.5	26.5	26.5		26.5	40.5	
Total Split (s)	34.5	34.5		34.5	34.5	34.5	26.2	26.2		40.5	40.5	
Total Split (%)	34.1%	34.1%		34.1%	34.1%	34.1%	25.9%	25.9%		40.0%	40.0%	
Maximum Green (s)	29.0	29.0		29.0	29.0	29.0	21.7	21.7		36.0	36.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5			5.5	5.5	4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.5	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		0.0	7.0	
Flash Don't Walk (s)	32.0	32.0		32.0	32.0	32.0	10.0	10.0		0.0	15.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)		29.0			29.0	29.0	56.5	56.5	101.2	62.2	62.2	
Actuated g/C Ratio		0.29			0.29	0.29	0.56	0.56	1.00	0.61	0.61	
v/c Ratio		0.70			0.48	0.11	0.06	0.11	0.02	0.04	0.09	
Control Delay (s/veh)		42.1			33.6	6.0	12.2	11.5	0.0	7.8	7.3	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		42.1			33.6	6.0	12.2	11.5	0.0	7.8	7.3	
LOS		D			C	A	B	B	A	A	A	
Approach Delay (s/veh)		42.1			28.7			10.1			7.3	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)		172			133	0	11	35	0	6	23	
Queue Length 95th (ft)		272			210	23	28	55	0	17	34	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)						120			100	80		
Base Capacity (vph)		430			520	500	585	2016	1567	922	3146	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.70			0.48	0.11	0.06	0.11	0.02	0.03	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 101.2	
Actuated Cycle Length: 101.2	
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay (s/veh): 22.1	Intersection LOS: C
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 39: University Blvd & Coal Ave

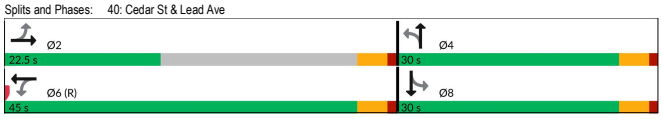


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	390	9	8	780	20	4	168	5	55	14	56
Future Volume (vph)	19	390	9	8	780	20	4	168	5	55	14	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00			0.99	
Frt		0.997			0.997			0.996			0.940	
Flt Protected		0.998			0.999			0.999			0.978	
Satd. Flow (prot)	0	1891	0	0	1891	0	0	1889	0	0	1735	0
Flt Permitted		0.956			0.996			0.993			0.603	
Satd. Flow (perm)	0	1811	0	0	1885	0	0	1878	0	0	1069	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			3			2			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			2138			144			153	
Travel Time (s)		8.4			48.6			3.3			3.5	
Confl. Peds. (#/hr)				1		1			1			1
Confl. Bikes (#/hr)						8			1			2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	415	10	9	830	21	4	179	5	59	15	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	445	0	0	860	0	0	188	0	0	134	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (%)	30.0%	30.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	18.0	18.0		40.5	40.5		25.5	25.5		25.5	25.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		53.9			53.9			12.1			12.1	
Actuated g/C Ratio		0.72			0.72			0.16			0.16	
v/c Ratio		0.34			0.63			0.62			0.61	
Control Delay (s/veh)		5.3			9.2			37.5			28.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		5.3			9.2			37.5			28.7	
LOS		A			A			D			C	
Approach Delay (s/veh)		5.3			9.2			37.5			28.7	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)		60			138			82			32	
Queue Length 95th (ft)		128			293			134			81	
Internal Link Dist (ft)		290			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)		1302			1356			639			402	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.63			0.29			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 73.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

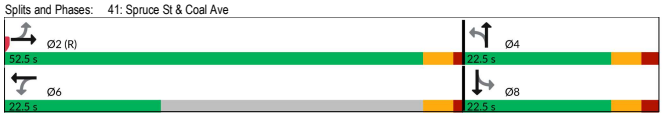


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	155	1	0	156	6	1	3	1	3	7	2
Future Volume (vph)	7	155	1	0	156	6	1	3	1	3	7	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.999			0.995			0.973			0.977	
Flt Protected		0.998						0.990			0.988	
Satd. Flow (prot)	0	1894	0	0	1889	0	0	1821	0	0	1827	0
Flt Permitted		0.992										
Satd. Flow (perm)	0	1882	0	0	1889	0	0	1838	0	0	1847	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			5			1			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	2		2	1		1	2		2	2		2
Confl. Bikes (#/hr)			8									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	165	1	0	166	6	1	3	1	3	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	173	0	0	172	0	0	5	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	52.5	52.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%		30.0%	30.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0		18.0	18.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		71.4			71.4			8.0			8.0	
Actuated g/C Ratio		0.95			0.95			0.11			0.11	
v/c Ratio		0.10			0.10			0.03			0.06	
Control Delay (s/veh)		1.0			0.9			28.4			28.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		1.0			0.9			28.4			28.7	
LOS		A			A			C			C	
Approach Delay (s/veh)		1.0			0.9			28.4			28.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		0			0			2			4	
Queue Length 95th (ft)		29			28			11			19	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1792			1798			417			420	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.10			0.10			0.01			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.10			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	217	0	0	217	245	99	585	0	0	0	0
Future Volume (vph)	244	217	0	0	217	245	99	585	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850						
Flt Protected		0.974					0.950					
Satd. Flow (prot)	0	1851	0	0	3610	1615	1805	3610	0	0	0	0
Flt Permitted		0.709					0.950					
Satd. Flow (perm)	0	1347	0	0	3610	1587	1805	3610	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						122						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			359			362			140	
Travel Time (s)		7.7			8.2			8.2			3.2	
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	260	231	0	0	231	261	105	622	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	491	0	0	231	261	105	622	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2				
Detector Template	Left	Thru			Thru	Right	Left	Thru				
Leading Detector (ft)	20	100			100	20	20	100				
Trailing Detector (ft)	0	0			0	0	0	0				
Detector 1 Position(ft)	0	0			0	0	0	0				
Detector 1 Size(ft)	20	6			6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				

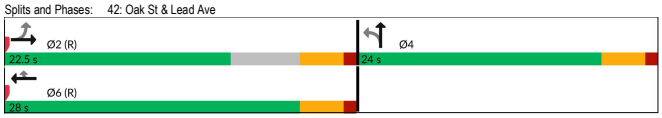
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		2			6			4				
Permitted Phases	2					6	4					
Detector Phase	2	2			6	6	4	4				
Switch Phase												
Minimum Initial (s)	5.0	5.0			8.0	8.0	8.0	8.0				
Minimum Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (%)	43.3%	43.3%			53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)	18.0	18.0			23.5	23.5	19.5	19.5				
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5				
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0				
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0				
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			2.0	2.0	2.0	2.0				
Recall Mode	C-Max	C-Max			C-Max	C-Max	None	None				
Walk Time (s)	7.0	7.0			7.0	7.0	7.0	7.0				
Flash Don't Walk (s)	11.0	11.0			10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)		28.8			28.8	28.8	14.2	14.2				
Actuated g/C Ratio		0.55			0.55	0.55	0.27	0.27				
v/c Ratio		0.66			0.12	0.28	0.21	0.63				
Control Delay (s/veh)		16.3			6.7	5.0	14.2	19.1				
Queue Delay		0.0			0.0	0.0	0.0	0.0				
Total Delay (s/veh)		16.3			6.7	5.0	14.2	19.1				
LOS		B			A	A	B	B				
Approach Delay (s/veh)		16.3			5.8			18.4				
Approach LOS		B			A			B				
Queue Length 50th (ft)		93			15	18	25	87				
Queue Length 95th (ft)		#271			35	60	47	112				
Internal Link Dist (ft)		258			279			282				60
Turn Bay Length (ft)						200						
Base Capacity (vph)		746			1999	933	676	1353				
Starvation Cap Reductn		0			0	0	0	0				
Spillback Cap Reductn		0			0	0	0	0				
Storage Cap Reductn		0			0	0	0	0				
Reduced v/c Ratio		0.66			0.12	0.28	0.16	0.46				

Intersection Summary			
Area Type:	Other		
Cycle Length: 52			
Actuated Cycle Length: 52			
Offset: 24 (46%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	

Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	428	0	0	428	203	0	283	110	0	0	0
Future Volume (vph)	203	428	0	0	428	203	0	283	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor								0.99				
Frt					0.957			0.958				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	1818	0	0	4940	0	0	0	0
Flt Permitted	0.289											
Satd. Flow (perm)	549	1900	0	0	1818	0	0	4940	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					63			117				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	216	455	0	0	455	216	0	301	117	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	455	0	0	671	0	0	418	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2			2				
Detector Template	Left	Thru			Thru			Thru				
Leading Detector (ft)	20	100			100			100				
Trailing Detector (ft)	0	0			0			0				
Detector 1 Position(ft)	0	0			0			0				
Detector 1 Size(ft)	20	6			6			6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0			0.0				
Detector 1 Queue (s)	0.0	0.0			0.0			0.0				
Detector 1 Delay (s)	0.0	0.0			0.0			0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

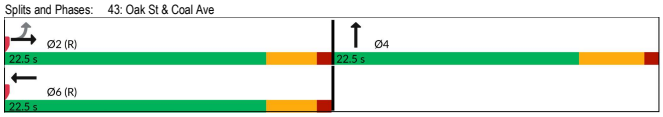
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA			NA				
Protected Phases		2			6			4				
Permitted Phases	2											
Detector Phase	2	2			6			4				
Switch Phase												
Minimum Initial (s)	10.0	10.0			5.0			10.0				
Minimum Split (s)	22.5	22.5			22.5			22.5				
Total Split (s)	22.5	22.5			22.5			22.5				
Total Split (%)	50.0%	50.0%			50.0%			50.0%				
Maximum Green (s)	18.0	18.0			18.0			17.0				
Yellow Time (s)	3.5	3.5			3.5			4.5				
All-Red Time (s)	1.0	1.0			1.0			1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.5	4.5			4.5			5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			3.0			2.0				
Recall Mode	C-Max	C-Max			C-Max			None				
Walk Time (s)	7.0	7.0			7.0			7.0				
Flash Don't Walk (s)	10.0	10.0			11.0			10.0				
Pedestrian Calls (#/hr)	0	0			0			0				
Act Effct Green (s)	25.0	25.0			25.0			10.0				
Actuated g/C Ratio	0.56	0.56			0.56			0.22				
v/c Ratio	0.71	0.43			0.65			0.35				
Control Delay (s/veh)	25.4	7.5			9.9			11.4				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	25.4	7.5			9.9			11.4				
LOS	C	A			A			B				
Approach Delay (s/veh)		13.2			9.9			11.4				
Approach LOS		B			A			B				
Queue Length 50th (ft)	35	58			90			23				
Queue Length 95th (ft)	#135	107			176			43				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	305	1054			1037			1939				
Starvation Cap Reductn	0	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.71	0.43			0.65			0.22				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 43: Oak St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	440	70	70	440	0	0	0	0	0	541	415
Future Volume (vph)	0	440	70	70	440	0	0	0	0	0	541	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.982									0.972	0.850
Flt Protected				0.950								
Satd. Flow (prot)	0	1866	0	1805	1900	0	0	0	0	0	3361	1470
Flt Permitted				0.320								
Satd. Flow (perm)	0	1866	0	608	1900	0	0	0	0	0	3361	1470
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21									68	237
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	468	74	74	468	0	0	0	0	0	576	441
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	542	0	74	468	0	0	0	0	0	708	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2						2	1
Detector Template		Thru		Left	Thru						Thru	Right
Leading Detector (ft)		100		20	100						100	20
Trailing Detector (ft)		0		0	0						0	0
Detector 1 Position(ft)		0		0	0						0	0
Detector 1 Size(ft)		6		20	6						6	20
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0						0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0						0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0						0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA						NA	Perm
Protected Phases		2			6						8	
Permitted Phases				6								8

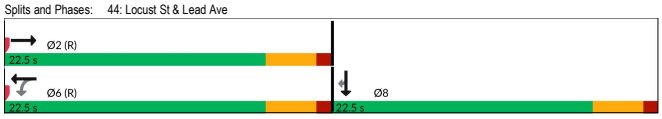
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		6	6						8	8
Switch Phase												
Minimum Initial (s)		5.0		10.0	10.0						10.0	10.0
Minimum Split (s)		22.5		22.5	22.5						22.5	22.5
Total Split (s)		22.5		22.5	22.5						22.5	22.5
Total Split (%)		50.0%		50.0%	50.0%						50.0%	50.0%
Maximum Green (s)		18.0		18.0	18.0						18.0	18.0
Yellow Time (s)		3.5		3.5	3.5						3.5	3.5
All-Red Time (s)		1.0		1.0	1.0						1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0		2.0	2.0						3.0	3.0
Recall Mode		C-Max		C-Max	C-Max						None	None
Walk Time (s)		7.0		7.0	7.0						7.0	7.0
Flash Don't Walk (s)		11.0		11.0	11.0						10.0	10.0
Pedestrian Calls (#/hr)		0		0	0						0	0
Act Effct Green (s)		20.2		20.2	20.2						15.8	15.8
Actuated g/C Ratio		0.45		0.45	0.45						0.35	0.35
v/c Ratio		0.64		0.27	0.55						0.58	0.46
Control Delay (s/veh)		16.6		12.5	13.1						12.3	5.5
Queue Delay		0.0		0.0	0.0						0.0	0.0
Total Delay (s/veh)		16.6		12.5	13.1						12.3	5.5
LOS		B		B	B						B	A
Approach Delay (s/veh)		16.6			13.0						10.2	
Approach LOS		B			B						B	
Queue Length 50th (ft)		104		12	90						64	12
Queue Length 95th (ft)		#212		38	165						102	53
Internal Link Dist (ft)		1009			258				86		4	
Turn Bay Length (ft)												
Base Capacity (vph)		848		272	852						1385	730
Starvation Cap Reductn		0		0	0						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.64		0.27	0.55						0.51	0.42

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 66.4%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 44: Locust St & Lead Ave

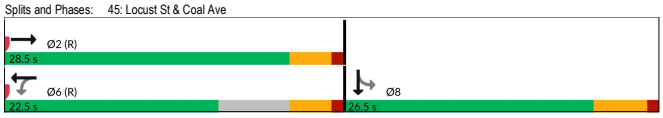


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	355	29	30	356	0	0	0	0	556	88	0
Future Volume (vph)	0	355	29	30	356	0	0	0	0	556	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00								1.00	1.00	
Frt		0.989										
Flt Protected					0.996					0.950	0.963	
Satd. Flow (prot)	0	3560	0	0	1892	0	0	0	0	1643	3330	0
Flt Permitted					0.953					0.950	0.963	
Satd. Flow (perm)	0	3560	0	0	1811	0	0	0	0	1641	3328	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)			9									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	378	31	32	379	0	0	0	0	591	94	0
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	409	0	0	411	0	0	0	0	295	390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2					1	2	
Detector Template		Thru		Left	Thru					Left	Thru	
Leading Detector (ft)		100		20	100					20	100	
Trailing Detector (ft)		0		0	0					0	0	
Detector 1 Position(ft)		0		0	0					0	0	
Detector 1 Size(ft)		6		20	6					20	6	
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6						8		
Detector Phase		2		6	6					8	8	
Switch Phase												
Minimum Initial (s)		10.0		5.0	5.0					10.0	10.0	
Minimum Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (%)		51.8%		40.9%	40.9%					48.2%	48.2%	
Maximum Green (s)		24.0		18.0	18.0					21.0	21.0	
Yellow Time (s)		3.5		3.5	3.5					4.5	4.5	
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)		0.0			0.0					0.0	0.0	
Total Lost Time (s)		4.5			4.5					5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0		3.0	3.0					2.0	2.0	
Recall Mode		C-Max		C-Max	C-Max					None	None	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)		13.0		11.0	11.0					10.0	10.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effct Green (s)		29.8			29.8					15.2	15.2	
Actuated g/C Ratio		0.54			0.54					0.28	0.28	
v/c Ratio		0.21			0.42					0.65	0.42	
Control Delay (s/veh)		7.5			10.5					23.7	16.9	
Queue Delay		0.0			0.4					0.0	0.0	
Total Delay (s/veh)		7.5			10.8					23.7	16.9	
LOS		A			B					C	B	
Approach Delay (s/veh)		7.5			10.8						19.8	
Approach LOS		A			B						B	
Queue Length 50th (ft)		30			71					93	57	
Queue Length 95th (ft)		64			161					141	76	
Internal Link Dist (ft)		280			272			72			117	
Turn Bay Length (ft)												
Base Capacity (vph)		1935			979					626	1270	
Starvation Cap Reductn		0			199					0	0	
Spillback Cap Reductn		0			0					0	0	
Storage Cap Reductn		0			0					0	0	
Reduced v/c Ratio		0.21			0.53					0.47	0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 14.0		Intersection LOS: B	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave



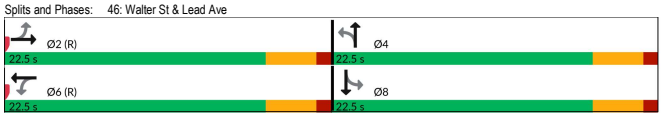
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	438	10	11	438	3	6	5	7	2	3	2
Future Volume (vph)	3	438	10	11	438	3	6	5	7	2	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.99	
Frt		0.997			0.999			0.947			0.961	
Flt Protected					0.999			0.984			0.986	
Satd. Flow (prot)	0	1893	0	0	1896	0	0	1771	0	0	1789	0
Flt Permitted		0.998			0.989							
Satd. Flow (perm)	0	1890	0	0	1877	0	0	1799	0	0	1813	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			1			7			2	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	2		2				2		2
Confl. Bikes (#/hr)						7						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	466	11	12	466	3	6	5	7	2	3	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	480	0	0	481	0	0	18	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		41.6			41.6			8.0			8.0	
Actuated g/C Ratio		0.92			0.92			0.18			0.18	
v/c Ratio		0.27			0.28			0.06			0.02	
Control Delay (s/veh)		2.0			1.9			18.1			14.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		2.0			1.9			18.1			14.1	
LOS		A			A			B			B	
Approach Delay (s/veh)		2.0			1.9			18.1			14.1	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			3			1	
Queue Length 95th (ft)		89			103			m16			9	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)		1747			1735			723			726	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.28			0.02			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave



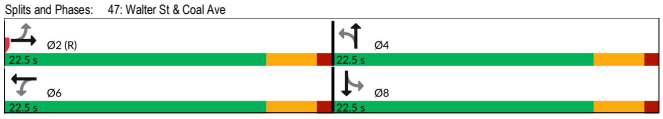
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	612	2	2	306	1	12	6	13	2	8	2
Future Volume (vph)	2	612	2	2	306	1	12	6	13	2	8	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99			1.00	
Frt								0.943			0.979	
Flt Protected								0.981			0.992	
Satd. Flow (prot)	0	1900	0	0	1900	0	0	1740	0	0	1839	0
Flt Permitted		0.999			0.998							
Satd. Flow (perm)	0	1898	0	0	1896	0	0	1771	0	0	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								14			2	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1				3		3	2		2
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	651	2	2	326	1	13	6	14	2	9	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	655	0	0	329	0	0	33	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		41.6			41.6			8.0			8.0	
Actuated g/C Ratio		0.92			0.92			0.18			0.18	
v/c Ratio		0.37			0.19			0.10			0.04	
Control Delay (s/veh)		2.5			1.7			12.6			16.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		2.5			1.7			12.6			16.4	
LOS		A			A			B			B	
Approach Delay (s/veh)		2.5			1.7			12.6			16.4	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			4			3	
Queue Length 95th (ft)		139			58			21			m12	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1754			1753			716			742	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.37			0.19			0.05			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	61	361	20	20	362	60	2	32	494	33	39	329
Future Volume (vph)	61	361	20	20	362	60	2	32	494	33	39	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00	0.98			1.00			1.00
Frt		0.994				0.850			0.991			
Flt Protected		0.993			0.997			0.950				0.995
Satd. Flow (prot)	0	1874	0	0	1877	1615	0	1805	3573	0	0	3560
Flt Permitted		0.892			0.966			0.444				0.820
Satd. Flow (perm)	0	1682	0	0	1818	1583	0	844	3573	0	0	2933
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		2				60			6			
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	8		8	2		2					2	
Confl. Bikes (#/hr)			2			8				1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Adj. Flow (vph)	65	384	21	21	385	64	2	34	526	35	41	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	406	64	0	36	561	0	0	391
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2	1	1	1	0		1	0
Detector Template	Left	Thru		Left	Thru	Right	Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100	20	20	35	0		20	0
Trailing Detector (ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Position(ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Size(ft)	20	6		20	6	20	20	33	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1571
Right Turn on Red	Yes
Satd. Flow (RTOR)	64
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	2
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	43
Shared Lane Traffic (%)	
Lane Group Flow (vph)	43
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	pm+pt	NA		Perm	NA
Protected Phases		2			2		1	1	4			4
Permitted Phases	2			2		2	4	4			4	
Detector Phase	2	2		2	2	2	1	1	4		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	3.0	3.0	8.0		8.0	8.0
Minimum Split (s)	38.5	38.5		38.5	38.5	38.5	31.9	31.9	39.6		39.6	39.6
Total Split (s)	38.5	38.5		38.5	38.5	38.5	31.9	31.9	39.6		39.6	39.6
Total Split (%)	35.0%	35.0%		35.0%	35.0%	35.0%	29.0%	29.0%	36.0%		36.0%	36.0%
Maximum Green (s)	33.5	33.5		33.5	33.5	33.5	27.4	27.4	35.1		35.1	35.1
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.0			5.0	5.0		4.5	4.5			4.5
Lead/Lag	Lag	Lag		Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	1.5	3.0		3.0	3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	Max		Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	0.0	0.0	7.0		7.0	7.0
Flash Don't Walk (s)	24.0	24.0		24.0	24.0	24.0	0.0	0.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0		0	0
Act Effct Green (s)		60.2			60.2	60.2		39.2	35.1			35.1
Actuated g/C Ratio		0.55			0.55	0.55		0.36	0.32			0.32
v/c Ratio		0.51			0.41	0.07		0.11	0.49			0.42
Control Delay (s/veh)		18.8			16.8	4.1		22.2	31.7			31.1
Queue Delay		0.0			0.0	0.0		0.0	1.1			0.0
Total Delay (s/veh)		18.8			16.8	4.1		22.2	32.8			31.1
LOS		B			B	A		C	C			C
Approach Delay (s/veh)		18.8			15.1				32.2			28.4
Approach LOS		B			B				C			C
Queue Length 50th (ft)		213			171	1		15	165			113
Queue Length 95th (ft)		311			250	22		36	219			158
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)						115		90				
Base Capacity (vph)		921			995	894		718	1144			935
Starvation Cap Reductn		0			0	0		0	347			0
Spillback Cap Reductn		0			0	0		0	0			0
Storage Cap Reductn		0			0	0		0	0			0
Reduced v/c Ratio		0.51			0.41	0.07		0.05	0.70			0.42

Intersection Summary

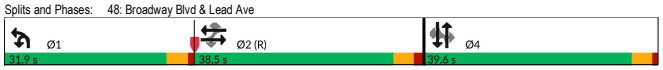
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	39.6
Total Split (s)	39.6
Total Split (%)	36.0%
Maximum Green (s)	35.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	35.1
Actuated g/C Ratio	0.32
v/c Ratio	0.08
Control Delay (s/veh)	3.5
Queue Delay	0.0
Total Delay (s/veh)	3.5
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	15
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	544
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.08

Intersection Summary

Intersection Signal Delay (s/veh): 24.1	Intersection LOS: C
Intersection Capacity Utilization 99.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave

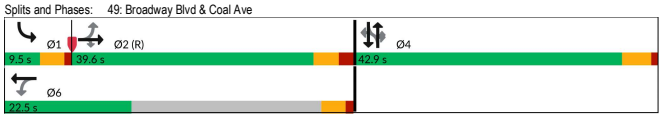


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	250	30	29	250	32	32	495	32	41	304	41
Future Volume (vph)	32	250	30	29	250	32	32	495	32	41	304	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130	100		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor		1.00	0.98		1.00				0.98			
Frt			0.850		0.986				0.850		0.982	
Flt Protected		0.994			0.995			0.997		0.950		
Satd. Flow (prot)	0	1889	1615	0	1861	0	0	3599	1615	1787	3545	0
Flt Permitted		0.932			0.952			0.911		0.376		
Satd. Flow (perm)	0	1769	1577	0	1781	0	0	3289	1581	707	3545	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77		9				83		20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		475			1105			421			359	
Travel Time (s)		10.8			25.1			9.6			8.2	
Confl. Peds. (#/hr)	9		9	2		2						
Confl. Bikes (#/hr)			8			1			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Adj. Flow (vph)	34	266	32	31	266	34	34	527	34	44	323	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	300	32	0	331	0	0	561	34	44	367	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		2			6!			4		1!	4	
Permitted Phases	2		2	6!			4		4	4		
Minimum Split (s)	39.6	39.6	39.6	22.5	22.5		42.9	42.9	42.9	9.5	42.9	
Total Split (s)	39.6	39.6	39.6	22.5	22.5		42.9	42.9	42.9	9.5	42.9	
Total Split (%)	43.0%	43.0%	43.0%	24.5%	24.5%		46.6%	46.6%	46.6%	10.3%	46.6%	
Maximum Green (s)	34.1	34.1	34.1	18.0	18.0		37.9	37.9	37.9	5.0	37.9	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		4.0	4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.5	5.5		4.5			5.0	5.0	4.5	5.0	
Lead/Lag	Lag	Lag	Lag							Lead		
Lead-Lag Optimize?	Yes	Yes	Yes							Yes		
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0		7.0	
Flash Don't Walk (s)	29.0	29.0	29.0	11.0	11.0		13.0	13.0	13.0		13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0			0	
Act Effct Green (s)		34.1	34.1		44.6			37.9	37.9	43.4	37.9	
Actuated g/C Ratio		0.37	0.37		0.48			0.41	0.41	0.47	0.41	
v/c Ratio		0.46	0.05		0.38			0.41	0.05	0.11	0.25	
Control Delay (s/veh)		24.8	0.2		16.2			20.4	0.1	12.4	17.3	
Queue Delay		0.0	0.0		0.0			0.0	0.0	0.0	0.0	
Total Delay (s/veh)		24.8	0.2		16.2			20.4	0.1	12.4	17.3	
LOS		C	A		B			C	A	B	B	
Approach Delay (s/veh)		22.4			16.2			19.2			16.7	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		130	0		114			118	0	12	67	
Queue Length 95th (ft)		205	1		177			163	1	28	99	
Internal Link Dist (ft)		395			1025			341			279	
Turn Bay Length (ft)			200						130	100		
Base Capacity (vph)		655	632		868			1354	700	392	1472	
Starvation Cap Reductn		0	0		0			0	0	0	0	
Spillback Cap Reductn		0	0		0			0	0	0	0	
Storage Cap Reductn		0	0		0			0	0	0	0	
Reduced v/c Ratio		0.46	0.05		0.38			0.41	0.05	0.11	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 95			
Control Type: Pretimed			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 18.6		Intersection LOS: B	
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 49: Broadway Blvd & Coal Ave



Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	34	1	363	9	9	244
Future Volume (vph)	24	34	1	363	9	9	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.922			0.997			
Flt Protected	0.979						0.998
Satd. Flow (prot)	1715	0	0	1894	0	0	1896
Flt Permitted	0.979						0.998
Satd. Flow (perm)	1715	0	0	1894	0	0	1896
Link Speed (mph)	30			30			30
Link Distance (ft)	2628			1321			545
Travel Time (s)	59.7			30.0			12.4
Confl. Peds. (#/hr)	5	5	2		2		
Confl. Bikes (#/hr)		1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	36	1	386	10	10	260
Shared Lane Traffic (%)							
Lane Group Flow (vph)	62	0	0	397	0	0	270
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	12			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane				Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Sign Control	Stop			Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	6	8	9	24	9	14	205	7	6	131	6
Future Volume (vph)	8	6	8	9	24	9	14	205	7	6	131	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.949			0.971			0.996			0.995	
Flt Protected		0.982			0.989			0.997			0.998	
Satd. Flow (prot)	0	1736	0	0	1789	0	0	1850	0	0	1850	0
Flt Permitted		0.982			0.989			0.997			0.998	
Satd. Flow (perm)	0	1736	0	0	1789	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	2		2							1		1
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	9	6	9	10	26	10	15	218	7	6	139	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	46	0	0	240	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	6	12	5	4	2	13	309	4	4	269	3
Future Volume (vph)	7	6	12	5	4	2	13	309	4	4	269	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.932			0.975			0.998			0.998	
Flt Protected		0.987			0.978		0.950			0.950		
Satd. Flow (prot)	0	1748	0	0	1812	0	1805	1896	0	1805	1896	0
Flt Permitted		0.987			0.978		0.950			0.950		
Satd. Flow (perm)	0	1748	0	0	1812	0	1805	1896	0	1805	1896	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				2		2				2		2
Confl. Bikes (#/hr)			2			2			1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	6	13	5	4	2	14	329	4	4	286	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	11	0	14	333	0	4	289	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	7	12	11	7	1
Future Volume (vph)	1	7	12	11	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.882				0.983	
Flt Protected	0.994			0.975		
Satd. Flow (prot)	1666	0	0	1852	1868	0
Flt Permitted	0.994			0.975		
Satd. Flow (perm)	1666	0	0	1852	1868	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3	4			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	7	13	12	7	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	25	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

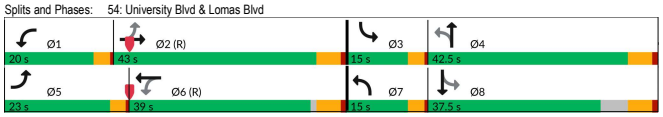
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Future Volume (vph)	225	891	99	147	673	178	68	313	98	147	315	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0	130		0	104		0	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.99		0.98	1.00	1.00	
Frt		0.985			0.969				0.850		0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5102	0	1805	5006	0	1752	3610	1615	1805	3446	0
Flt Permitted	0.189			0.182			0.444			0.466		
Satd. Flow (perm)	359	5102	0	345	5006	0	812	3610	1588	885	3446	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			55				136		49	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1127			1168			542			544	
Travel Time (s)		22.0			22.8			12.3			12.4	
Confl. Peds. (#/hr)	2		2	5		5	17		17	1		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	239	948	105	156	716	189	72	333	104	156	335	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	1053	0	156	905	0	72	333	104	156	465	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	0	0	0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	40	0		17	0		25	0	0	0	0	
Trailing Detector (ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		3	0		0	0	0	0	0	
Detector 1 Size(ft)	40	6		14	6		25	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Free	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		Free	8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	20.0		6.0	20.0	
Minimum Split (s)	23.0	42.5		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (s)	23.0	43.0		20.0	39.0		15.0	42.5		15.0	37.5	
Total Split (%)	19.1%	35.7%		16.6%	32.4%		12.4%	35.3%		12.4%	31.1%	
Maximum Green (s)	19.5	37.5		16.5	33.5		11.5	37.0		11.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		2.0	3.0		1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		30.0			19.0			30.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.2	44.1		52.3	40.4		48.3	38.8	120.5	53.2	42.9	
Actuated g/C Ratio	0.49	0.37		0.43	0.34		0.40	0.32	1.00	0.44	0.36	
v/c Ratio	0.71	0.56		0.58	0.53		0.19	0.29	0.07	0.34	0.37	
Control Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	29.7	31.8		26.5	32.2		20.6	31.7	0.1	22.3	27.4	
LOS	C	C		C	C		C	C	A	C	C	
Approach Delay (s/veh)		31.5			31.4			23.7			26.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	105	233		65	193		32	102	0	72	127	
Queue Length 95th (ft)	160	297		106	257		60	144	0	117	180	
Internal Link Dist (ft)		1047			1088			462			464	
Turn Bay Length (ft)	147			130			104			200		
Base Capacity (vph)	411	1875		365	1714		440	1162	1588	481	1257	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.58	0.56		0.43	0.53		0.16	0.29	0.07	0.32	0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120.5			
Actuated Cycle Length: 120.5			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Future Volume (vph)	7	233	1989	100	8	51	919	133	152	69	66	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.98				0.98				
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1805	1753	0	0
Flt Permitted		0.232				0.062			0.614			
Satd. Flow (perm)	0	441	5187	1579	0	118	5136	1587	1167	1753	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				126		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	1	1		1	5	5		5				
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Adj. Flow (vph)	7	248	2116	106	9	54	978	141	162	73	70	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	2116	106	0	63	978	141	162	143	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	109	34	101
Future Volume (vph)	109	34	101
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1599
Flt Permitted	0.666		
Satd. Flow (perm)	1264	1900	1599
Right Turn on Red			Yes
Satd. Flow (RTOR)			118
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%
Adj. Flow (vph)	116	36	107
Shared Lane Traffic (%)			
Lane Group Flow (vph)	127	36	107
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	12.0	54.0		42.0
Total Split (%)	18.0%	18.0%	43.0%	43.0%	12.0%	12.0%	37.0%	37.0%	10.0%	45.0%		35.0%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	8.5	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		81.2	71.7	71.7		71.9	64.4	64.4	31.8	29.8		
Actuated g/C Ratio		0.68	0.60	0.60		0.60	0.54	0.54	0.27	0.25		
v/c Ratio		0.60	0.68	0.11		0.43	0.35	0.15	0.46	0.30		
Control Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		14.3	19.3	4.4		25.0	18.2	8.7	39.0	24.5		
LOS		B	B	A		C	B	A	D	C		
Approach Delay (s/veh)			18.1				17.4			32.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		67	393	6		18	221	28	102	59		
Queue Length 95th (ft)		125	545	36		62	230	66	151	107		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		503	3098	977		229	2758	910	354	737		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.51	0.68	0.11		0.28	0.35	0.15	0.46	0.19		

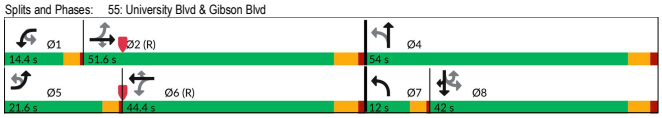
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 20.3		Intersection LOS: C	

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	42.0	42.0	42.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	35.0%	35.0%	35.0%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	17.9	17.9	17.9
Actuated g/C Ratio	0.15	0.15	0.15
v/c Ratio	0.68	0.13	0.32
Control Delay (s/veh)	65.4	42.9	8.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	65.4	42.9	8.5
LOS	E	D	A
Approach Delay (s/veh)		39.8	
Approach LOS		D	
Queue Length 50th (ft)	95	25	0
Queue Length 95th (ft)	152	52	40
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	384	577	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.06	0.19

Intersection Summary

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Lane Configurations												
Traffic Volume (vph)	4	81	215	18	14	201	17	29	155	45	10	27
Future Volume (vph)	4	81	215	18	14	201	17	29	155	45	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0	155		0	80		0		190
Storage Lanes		1		1	1		0	1		0		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.96	1.00	1.00		0.99	0.99			0.98
Frt				0.850		0.988			0.960			
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	1900	1615	1805	3560	0	1805	1787	0	0	1805
Flt Permitted		0.125			0.950			0.502				0.343
Satd. Flow (perm)	0	235	1900	1552	1800	3560	0	947	1787	0	0	638
Right Turn on Red				Yes							Yes	
Satd. Flow (RTOR)				116					2			
Link Speed (mph)			35			30			30			
Link Distance (ft)			766			747			1373			
Travel Time (s)			14.9			17.0			31.2			
Confl. Peds. (#/hr)	5	5		5	1		1	7		7	7	8
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	4	86	229	19	15	214	18	31	165	48	11	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	229	19	15	232	0	31	224	0	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Right	Left
Median Width(ft)			12			12			12			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2		1	1			1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru			Left
Leading Detector (ft)	20	50	100	20	30	100		40	40			38
Trailing Detector (ft)	0	3	0	0	2	0		0	0			0
Detector 1 Position(ft)	0	3	0	0	2	0		0	0			0
Detector 1 Size(ft)	20	47	6	20	28	6		40	40			38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBT	SBR	SWR	SWR2
Lane Configurations				
Traffic Volume (vph)	152	31	82	7
Future Volume (vph)	152	31	82	7
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)		190	0	
Storage Lanes		1	2	
Taper Length (ft)				
Lane Util. Factor	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.96
Frt		0.850	0.850	0.850
Flt Protected				
Satd. Flow (prot)	1900	1417	1615	1615
Flt Permitted				
Satd. Flow (perm)	1900	1379	1615	1544
Right Turn on Red		Yes		Yes
Satd. Flow (RTOR)		121		116
Link Speed (mph)	30			
Link Distance (ft)	2313			
Travel Time (s)	52.6			
Confl. Peds. (#/hr)		8	8	8
Confl. Bikes (#/hr)		3	2	2
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	14%	0%	0%
Adj. Flow (vph)	162	33	87	7
Shared Lane Traffic (%)				
Lane Group Flow (vph)	162	33	87	7
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(ft)	12			
Link Offset(ft)	0			
Crosswalk Width(ft)	16			
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	9
Number of Detectors	1	1	1	1
Detector Template	Thru	Right	Right	Right
Leading Detector (ft)	42	45	20	20
Trailing Detector (ft)	0	0	0	0
Detector 1 Position(ft)	0	0	0	0
Detector 1 Size(ft)	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				

Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	Prot	NA	Perm	Prot	NA		pm+pt	NA			pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5			2				4				8
Detector Phase	5	5	2	2	1	6		7	4			3
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0		4.0	12.0			4.0
Minimum Split (s)	18.7	18.7	47.3	47.3	15.4	42.9		15.4	31.9			15.4
Total Split (s)	22.5	22.5	47.3	47.3	22.5	42.9		15.4	31.9			15.4
Total Split (%)	19.2%	19.2%	40.4%	40.4%	19.2%	36.6%		13.2%	27.2%			13.2%
Maximum Green (s)	17.0	17.0	41.8	41.8	17.0	37.4		10.4	26.9			10.4
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5			3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.5	5.5	5.5	5.5	5.5		5.0	5.0			5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes			Yes
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0
Recall Mode	None	None	C-Max	C-Max	None	Max		None	None			None
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0			0.0			
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	20.0			0.0			
Pedestrian Calls (#/hr)	0	0	0	0	0	0			0			
Act Effct Green (s)		32.0	74.0	74.0	6.5	41.8		24.4	19.8			24.3
Actuated g/C Ratio		0.27	0.63	0.63	0.06	0.36		0.21	0.17			0.21
v/c Ratio		1.41	0.19	0.02	0.15	0.18		0.13	0.74			0.14
Control Delay (s/veh)		292.3	13.2	0.1	55.5	26.4		30.9	60.1			31.3
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		292.3	13.2	0.1	55.5	26.4		30.9	60.1			31.3
LOS		F	B	A	E	C		C	E			C
Approach Delay (s/veh)			86.8			28.2			56.5			
Approach LOS			F			C			E			
Queue Length 50th (ft)		~98	65	0	11	62		17	161			16
Queue Length 95th (ft)		#219	161	0	33	93		38	232			36
Internal Link Dist (ft)			686			667			1293			
Turn Bay Length (ft)		250			155			80				190
Base Capacity (vph)		64	1201	1024	262	1270		286	412			245
Starvation Cap Reductn		0	0	0	0	0		0	0			0
Spillback Cap Reductn		0	0	0	0	0		0	0			0
Storage Cap Reductn		0	0	0	0	0		0	0			0
Reduced v/c Ratio		1.41	0.19	0.02	0.06	0.18		0.11	0.54			0.12

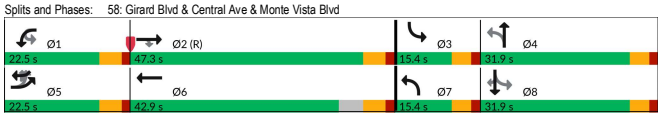
Intersection Summary
Area Type: Other
Cycle Length: 117.1
Actuated Cycle Length: 117.1
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41

Lane Group	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)				
Turn Type	NA	Perm	Over	Perm
Protected Phases	8		5	
Permitted Phases		8		5
Detector Phase	8	8	5	5
Switch Phase				
Minimum Initial (s)	12.0	12.0	10.0	10.0
Minimum Split (s)	31.9	31.9	18.7	18.7
Total Split (s)	31.9	31.9	22.5	22.5
Total Split (%)	27.2%	27.2%	19.2%	19.2%
Maximum Green (s)	26.9	26.9	17.0	17.0
Yellow Time (s)	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None
Walk Time (s)	4.0	4.0	4.0	4.0
Flash Don't Walk (s)	20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0
Act Effct Green (s)	19.7	19.7	32.0	32.0
Actuated g/C Ratio	0.17	0.17	0.27	0.27
v/c Ratio	0.51	0.10	0.20	0.01
Control Delay (s/veh)	48.9	0.6	38.9	0.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	0.6	38.9	0.0
LOS	D	A	D	A
Approach Delay (s/veh)	39.5			
Approach LOS	D			
Queue Length 50th (ft)	112	0	53	0
Queue Length 95th (ft)	170	0	109	0
Internal Link Dist (ft)	2233			
Turn Bay Length (ft)		190		
Base Capacity (vph)	436	409	440	505
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.08	0.20	0.01

Intersection Summary

Intersection Signal Delay (s/veh): 54.3 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	450	450	0	0	0
Future Volume (vph)	0	450	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		359	370		137	
Travel Time (s)		8.2	8.4		3.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	479	479	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	479	479	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.0% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	385	0	0	385	0	0	0	0	0	0	0
Future Volume (vph)	0	385	0	0	385	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	410	0	0	410	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	410	0	0	410	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.6%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Future Volume (vph)	25	776	202	7	152	874	18	158	17	140	21	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	133		0		133		0	0		0	0	
Storage Lanes	1		0		1		0	0		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00							1.00			1.00
Frt		0.969				0.997				0.850		0.960
Flt Protected	0.950				0.950				0.957			0.990
Satd. Flow (prot)	1805	5012	0	0	1805	5171	0	0	1770	1599	0	1798
Flt Permitted	0.301				0.243				0.646			0.910
Satd. Flow (perm)	571	5012	0	0	462	5171	0	0	1194	1599	0	1652
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		64				5				143		17
Link Speed (mph)		45				45			25			25
Link Distance (ft)		3760				297			341			288
Travel Time (s)		57.0				4.5			9.3			7.9
Confl. Peds. (#/hr)	1		1					1		1	2	
Confl. Bikes (#/hr)										3		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%
Adj. Flow (vph)	26	792	206	7	155	892	18	161	17	143	21	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	998	0	0	162	910	0	0	178	143	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			0
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	100		20	20	100		20	31	20	20	35
Trailing Detector (ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0	0	0	0
Detector 1 Size(ft)	20	6		20	20	6		20	31	20	20	35
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	29
Future Volume (vph)	29
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	30
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

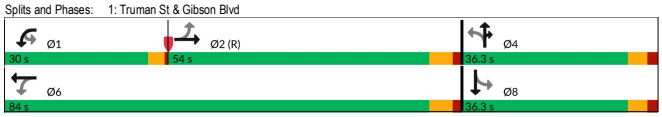
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm	NA
Protected Phases		2			1	6			4	4		8
Permitted Phases	2			1	6			4			8	
Detector Phase	2	2		1	1	6		4	4	4	8	8
Switch Phase												
Minimum Initial (s)	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	51.7	51.7		22.0	22.0	73.7		36.3	36.3	36.3	36.3	36.3
Total Split (s)	54.0	54.0		30.0	30.0	84.0		36.3	36.3	36.3	36.3	36.3
Total Split (%)	44.9%	44.9%		24.9%	24.9%	69.8%		30.2%	30.2%	30.2%	30.2%	30.2%
Maximum Green (s)	48.3	48.3		26.5	26.5	78.3		30.8	30.8	30.8	30.8	30.8
Yellow Time (s)	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Lost Time (s)	5.7	5.7			3.5	5.7			5.5	5.5		5.5
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	Max		None	None	None	None	None
Walk Time (s)	7.0	7.0				7.0		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0				17.0		25.0	25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0				0		0	0	0	0	0
Act Effct Green (s)	75.9	75.9			88.9	86.7			22.4	22.4		22.4
Actuated g/C Ratio	0.63	0.63			0.74	0.72			0.19	0.19		0.19
v/c Ratio	0.07	0.31			0.38	0.24			0.80	0.35		0.31
Control Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
Queue Delay	0.0	0.0			0.0	0.0			0.0	0.0		0.0
Total Delay (s/veh)	12.1	10.7			8.0	6.4			71.5	8.2		35.7
LOS	B	B			A	A			E	A		D
Approach Delay (s/veh)		10.8				6.6			43.3			35.7
Approach LOS		B				A			D			D
Queue Length 50th (ft)	7	112			32	77			133	0		56
Queue Length 95th (ft)	25	178			68	121			201	51		100
Internal Link Dist (ft)		3680				217			261			208
Turn Bay Length (ft)	133				133							
Base Capacity (vph)	360	3184			637	3729			305	515		435
Starvation Cap Reductn	0	0			0	0			0	0		0
Spillback Cap Reductn	0	0			0	0			0	0		0
Storage Cap Reductn	0	0			0	0			0	0		0
Reduced v/c Ratio	0.07	0.31			0.25	0.24			0.58	0.28		0.23

Intersection Summary		
Area Type:	Other	
Cycle Length: 120.3		
Actuated Cycle Length: 120.3		
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 14.2	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Future Volume (vph)	9	86	946	2	1	3	1016	58	0	0	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98		0.99		0.99
Frt				0.850				0.850		0.850		
Flt Protected		0.950				0.950						0.950
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5136	1615	1900	3029	0	1805
Flt Permitted		0.241				0.284						0.597
Satd. Flow (perm)	0	458	5187	1615	0	540	5136	1581	1900	3029	0	1127
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				86				86		354		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												6
Confl. Bikes (#/hr)								1			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	88	965	2	1	3	1037	59	0	0	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	965	2	0	4	1037	59	0	3	0	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	104
Future Volume (vph)	0	104
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1615
Flt Permitted		
Satd. Flow (perm)	1900	1587
Right Turn on Red		Yes
Satd. Flow (RTOR)		384
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	106
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	106
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.2	13.2	42.9	42.9	13.2	13.2	42.9	42.9	13.2	40.7		13.2
Total Split (s)	15.6	15.6	48.0	48.0	16.8	16.8	49.2	49.2	14.4	40.8		14.4
Total Split (%)	13.0%	13.0%	40.0%	40.0%	14.0%	14.0%	41.0%	41.0%	12.0%	34.0%		12.0%
Maximum Green (s)	12.1	12.1	43.0	43.0	13.3	13.3	44.2	44.2	10.9	35.3		10.9
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		100.0	97.1	97.1		95.5	89.9	89.9		8.0		12.9
Actuated g/C Ratio		0.83	0.81	0.81		0.80	0.75	0.75		0.07		0.11
v/c Ratio		0.22	0.23	0.00		0.01	0.27	0.05		0.01		0.37
Control Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)		4.1	3.4	0.0		3.3	5.5	0.8		0.0		54.0
LOS		A	A	A		A	A	A		A		D
Approach Delay (s/veh)			3.4				5.2					
Approach LOS			A				A					
Queue Length 50th (ft)		8	35	0		0	69	0		0		47
Queue Length 95th (ft)		30	116	m0		m3	145	7		0		82
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250		250		339		215				150
Base Capacity (vph)		517	4196	1323		590	3849	1206		1140		188
Starvation Cap Reductn		0	0	0		0	0	0		0		0
Spillback Cap Reductn		0	0	0		0	0	0		0		0
Storage Cap Reductn		0	0	0		0	0	0		0		0
Reduced v/c Ratio		0.19	0.23	0.00		0.01	0.27	0.05		0.00		0.34

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

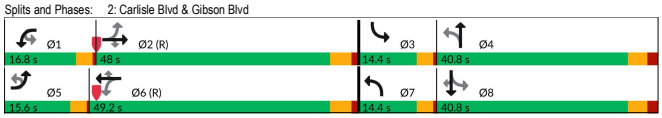
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	40.7	40.7
Total Split (s)	40.8	40.8
Total Split (%)	34.0%	34.0%
Maximum Green (s)	35.3	35.3
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		10.9
Actuated g/C Ratio		0.09
v/c Ratio		0.22
Control Delay (s/veh)		1.0
Queue Delay		0.0
Total Delay (s/veh)		1.0
LOS		A
Approach Delay (s/veh)	20.7	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		737
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.14

Intersection Summary

Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



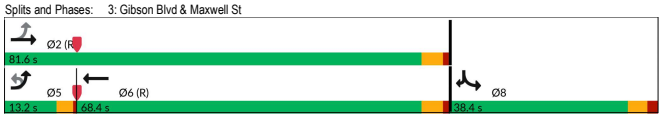
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	1	16	1009	1073	33	28	21
Future Volume (vph)	1	16	1009	1073	33	28	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5111	0	1805	1615
Flt Permitted		0.227				0.950	
Satd. Flow (perm)	0	431	5187	5111	0	1799	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			21
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	16	1030	1095	34	29	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	17	1030	1129	0	29	21
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							
Detector 2 Extend (s)			0.0	0.0			

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.2	13.2	73.7	60.5		36.3	36.3
Total Split (s)	13.2	13.2	81.6	68.4		38.4	38.4
Total Split (%)	11.0%	11.0%	68.0%	57.0%		32.0%	32.0%
Maximum Green (s)	9.7	9.7	76.6	63.4		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		104.8	104.3	101.2		8.9	8.9
Actuated g/C Ratio		0.87	0.87	0.84		0.07	0.07
v/c Ratio		0.04	0.23	0.26		0.22	0.15
Control Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		1.6	2.0	2.9		55.9	22.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			2.0	2.9		41.7	
Approach LOS			A	A		D	
Queue Length 50th (ft)		1	36	46		22	0
Queue Length 95th (ft)		6	129	101		52	26
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		487	4509	4310		494	458
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.03	0.23	0.26		0.06	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 22.5 (19%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	

Intersection Capacity Utilization 36.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Future Volume (vph)	6	65	956	30	63	1008	68	18	26	51	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor								0.99		0.98	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5136	1615	1805	3610	1615	1805	1900
Flt Permitted		0.249			0.267			0.740			0.560	
Satd. Flow (perm)	0	473	5187	1615	507	5136	1615	1399	3610	1585	1063	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				86			86			86		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)								6		6	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	66	976	31	64	1029	69	18	27	52	54	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	976	31	64	1029	69	18	27	52	54	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	84
Future Volume (vph)	84
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1563
Right Turn on Red	Yes
Satd. Flow (RTOR)	86
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	2%
Adj. Flow (vph)	86
Shared Lane Traffic (%)	
Lane Group Flow (vph)	86
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	13.2	13.2	51.7	51.7	13.2	51.7	51.7	13.2	31.9	31.9	13.2	31.9
Total Split (s)	14.4	14.4	56.4	56.4	14.4	56.4	56.4	14.4	34.8	34.8	14.4	34.8
Total Split (%)	12.0%	12.0%	47.0%	47.0%	12.0%	47.0%	47.0%	12.0%	29.0%	29.0%	12.0%	29.0%
Maximum Green (s)	10.9	10.9	50.9	50.9	10.9	50.9	50.9	10.9	29.3	29.3	10.9	29.3
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		91.2	85.8	85.8	90.9	85.6	85.6	16.3	12.0	12.0	20.3	16.9
Actuated g/C Ratio		0.76	0.72	0.72	0.76	0.71	0.71	0.14	0.10	0.10	0.17	0.14
v/c Ratio		0.17	0.26	0.03	0.15	0.28	0.06	0.09	0.07	0.22	0.25	0.10
Control Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		5.4	8.4	0.0	7.6	10.9	5.2	38.7	49.6	5.4	41.7	46.5
LOS		A	A	A	A	B	A	D	D	A	D	D
Approach Delay (s/veh)			7.9			10.4			23.9			27.6
Approach LOS			A			B			C			C
Queue Length 50th (ft)		13	109	0	12	87	0	11	10	0	35	18
Queue Length 95th (ft)		28	146	0	40	170	29	31	25	14	69	48
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		490	3707	1179	514	3665	1177	288	881	452	262	463
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.15	0.26	0.03	0.12	0.28	0.06	0.06	0.03	0.12	0.21	0.06

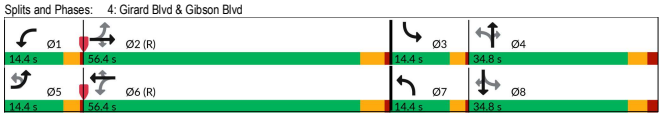
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	31.9
Total Split (s)	34.8
Total Split (%)	29.0%
Maximum Green (s)	29.3
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	16.9
Actuated g/C Ratio	0.14
v/c Ratio	0.29
Control Delay (s/veh)	12.8
Queue Delay	0.0
Total Delay (s/veh)	12.8
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	48
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	446
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.19

Intersection Summary

Intersection Signal Delay (s/veh): 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Future Volume (vph)	1	81	711	211	191	883	67	244	170	271	1	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290	400		220	190		0		200
Storage Lanes		1		1	1		1	2		1		1
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00	0.95	1.00
Ped Bike Factor					1.00		0.98					1.00
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950				0.950
Satd. Flow (prot)	0	1805	5136	1615	1787	5136	1615	3502	5187	1615	0	1805
Flt Permitted		0.292			0.332			0.416				0.638
Satd. Flow (perm)	0	555	5136	1615	624	5136	1589	1533	5187	1615	0	1210
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				215			88			277		
Link Speed (mph)			45			45			40			
Link Distance (ft)			2630			2614			853			
Travel Time (s)			39.8			39.6			14.5			
Confl. Peds. (#/hr)					3		3				1	1
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	83	726	215	195	901	68	249	173	277	1	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	726	215	195	901	68	249	173	277	0	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			24			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2	1	1	2	1	1	2	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left
Leading Detector (ft)	20	20	100	20	20	100	20	20	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6	20	20	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	132	129
Future Volume (vph)	132	129
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.926	
Flt Protected		
Satd. Flow (prot)	3321	0
Flt Permitted		
Satd. Flow (perm)	3321	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	132	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	135	132
Shared Lane Traffic (%)		
Lane Group Flow (vph)	267	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		5	2		1	6		7	4			3
Permitted Phases	5	2		2	6		6	4		4	3	8
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	3.0
Minimum Split (s)	13.2	13.2	40.7	40.7	13.2	40.7	40.7	13.2	42.9	42.9	13.2	13.2
Total Split (s)	18.0	18.0	49.2	49.2	18.0	49.2	49.2	13.2	42.9	42.9	13.2	13.2
Total Split (%)	14.6%	14.6%	39.9%	39.9%	14.6%	39.9%	39.9%	10.7%	34.8%	34.8%	10.7%	10.7%
Maximum Green (s)	14.5	14.5	43.2	43.2	14.5	43.2	43.2	9.7	36.9	36.9	9.7	9.7
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	4.0	4.0	3.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	1.5
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		
Flash Don't Walk (s)			24.0	24.0		25.0	25.0		30.0	30.0		
Pedestrian Calls (#/hr)			0	0		0	0		0	0		
Act Effct Green (s)		77.9	69.5	69.5	83.6	72.4	72.4	30.5	20.2	20.2		26.4
Actuated g/C Ratio		0.63	0.56	0.56	0.68	0.59	0.59	0.25	0.16	0.16		0.21
v/c Ratio		0.20	0.25	0.21	0.39	0.30	0.07	0.47	0.20	0.56		0.23
Control Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		8.1	14.3	2.4	9.4	13.3	1.6	39.4	46.3	10.1		36.9
LOS		A	B	A	A	B	A	D	D	B		D
Approach Delay (s/veh)			11.3			12.0			29.5			
Approach LOS			B			B			C			
Queue Length 50th (ft)		20	101	0	50	123	0	81	45	0		41
Queue Length 95th (ft)		40	142	38	84	164	14	115	68	80		78
Internal Link Dist (ft)			2550			2534			773			
Turn Bay Length (ft)		438		290	400		220	190				200
Base Capacity (vph)		525	2894	1004	563	3017	969	533	1552	677		328
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0		0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0		0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0		0
Reduced v/c Ratio		0.16	0.25	0.21	0.35	0.30	0.07	0.47	0.11	0.41		0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 123.3	
Actuated Cycle Length: 123.3	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	42.9	
Total Split (s)	42.9	
Total Split (%)	34.8%	
Maximum Green (s)	36.9	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.5	
Actuated g/C Ratio	0.13	
v/c Ratio	0.48	
Control Delay (s/veh)	27.5	
Queue Delay	0.0	
Total Delay (s/veh)	27.5	
LOS	C	
Approach Delay (s/veh)	29.4	
Approach LOS	C	
Queue Length 50th (ft)	52	
Queue Length 95th (ft)	93	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1086	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.25	
Intersection Summary		

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Yale Blvd & Gibson Blvd

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		5.3	4.7		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			4.8			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		8	70		25	119		40	136
Queue Length 95th (ft)		32	85		26	118		56	183		81	204
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38

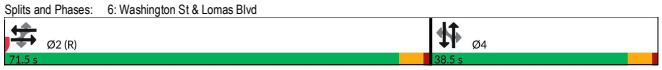
Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



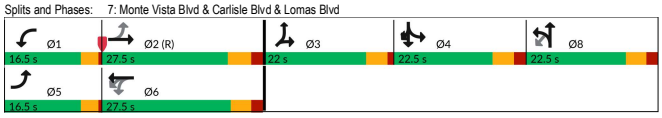
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00		1.00			0.98	1.00	
Frt		0.992					0.980				0.976	
Flt Protected	0.950				0.950		0.995			0.950		
Satd. Flow (prot)	1805	5139	0	0	1805	0	5041	0	0	1738	1850	0
Flt Permitted	0.230				0.395		0.774			0.631		
Satd. Flow (perm)	437	5139	0	0	749	0	3920	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							23				7	
Link Speed (mph)		35					35				25	
Link Distance (ft)		2652					2690				2352	
Travel Time (s)		51.7					52.4				64.1	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	32	0	743	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	Perm	NA		Perm	Split	NA	
Protected Phases	5	2			1		6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	6	6		8	8	8	

Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	1.00				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1797	1900	1615	1615	1796	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				162		172	
Link Speed (mph)		25			35		
Link Distance (ft)		634			350		
Travel Time (s)		17.3			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	Prot	Prot	Prot	Prot	
Protected Phases	4	4	4	4	3	3	
Permitted Phases							
Detector Phase	4	4	4	4	3	3	

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	16.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	16.5	31.0			16.5	33.5	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	27.5	27.5		22.5	22.5	22.5	
Total Split (%)	14.9%	24.8%			14.9%	24.8%	24.8%		20.3%	20.3%	20.3%	
Maximum Green (s)	13.0	21.5			13.0	22.0	22.0		17.0	17.0	17.0	
Yellow Time (s)	3.0	4.0			3.0	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	2.0	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0			3.5		5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	3.0	1.5			1.5	3.0	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	Max	Max		None	None	None	
Walk Time (s)		7.0				7.0	7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0				21.0	21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0				0	0		0	0	0	
Act Effct Green (s)	46.7	38.6			38.3		31.2			18.3	18.3	
Actuated g/C Ratio	0.42	0.35			0.35		0.28			0.16	0.16	
v/c Ratio	0.39	0.36			0.10		0.67			0.15	0.85	
Control Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay (s/veh)	26.1	30.1			23.3		39.8			41.8	68.2	
LOS	C	C			C		D			D	E	
Approach Delay (s/veh)		29.5					39.1				65.7	
Approach LOS		C					D				E	
Queue Length 50th (ft)	55	136			14		174			17	173	
Queue Length 95th (ft)	100	185			36		#268			46	#339	
Internal Link Dist (ft)		2572					2610				2272	
Turn Bay Length (ft)	95				100					112		
Base Capacity (vph)	344	1788			429		1117			191	318	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.35	0.36			0.07		0.67			0.15	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 111			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 40.3		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	22.0	22.0	
Total Split (s)	22.5	22.5	22.5	22.5	22.0	22.0	
Total Split (%)	20.3%	20.3%	20.3%	20.3%	19.8%	19.8%	
Maximum Green (s)	17.0	17.0	17.0	17.0	17.5	17.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None	None	
Walk Time (s)	0.0	0.0	0.0	0.0			
Flash Don't Walk (s)	0.0	0.0	0.0	0.0			
Pedestrian Calls (#/hr)	0	0	0	0			
Act Effct Green (s)	15.3	15.3	15.3	15.3	11.7	11.7	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.11	0.11	
v/c Ratio	0.52	0.77	0.44	0.31	0.61	0.24	
Control Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	51.5	65.7	49.6	4.1	60.6	2.1	
LOS	D	E	D	A	E	A	
Approach Delay (s/veh)		46.7			32.5		
Approach LOS		D			C		
Queue Length 50th (ft)	86	140	64	0	81	0	
Queue Length 95th (ft)	145	216	116	17	135	4	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	285	299	255	391	284	592	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.68	0.38	0.29	0.41	0.18	
Intersection Summary							

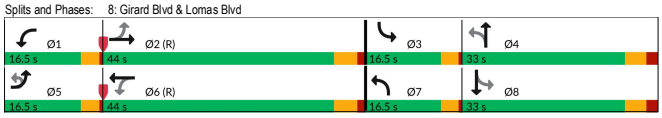
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	0.999
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1715	1716
Flt Permitted		0.414			0.330			0.511			0.362	0.996
Satd. Flow (perm)	0	778	5060	0	626	5107	0	970	1792	0	653	1711
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			21
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1515			2652			2313			578
Travel Time (s)			29.5			51.7			52.6			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	44	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		71.1	65.2		72.8	66.1		26.4	18.1		24.4	20.8
Actuated g/C Ratio		0.65	0.59		0.66	0.60		0.24	0.16		0.22	0.19
v/c Ratio		0.10	0.25		0.19	0.19		0.25	0.74		0.22	0.80
Control Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.2	11.4		8.6	11.5		30.9	52.8		30.3	54.4
LOS		A	B		A	B		C	D		C	D
Approach Delay (s/veh)			11.2			11.1			47.6			51.0
Approach LOS			B			B			D			D
Queue Length 50th (ft)		12	85		20	67		39	142		24	166
Queue Length 95th (ft)		32	107		48	108		68	213		48	232
Internal Link Dist (ft)			1435			2572			2233			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		650	3013		564	3075		347	465		292	500
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.08	0.25		0.16	0.19		0.21	0.50		0.15	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 22.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Future Volume (vph)	13	166	883	66	9	32	678	86	47	22	34	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94	0.99				1.00		0.99		0.98	
Frt			0.990				0.983				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5070	0	0	1805	3540	0	1770	1900	1615	0
Flt Permitted		0.305				0.284			0.526			
Satd. Flow (perm)	0	545	5070	0	0	540	3540	0	970	1900	1588	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				13				147	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)	58	58		58					11		11	
Confl. Bikes (#/hr)				6				1			7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	13	169	901	67	9	33	692	88	48	22	35	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	968	0	0	42	780	0	48	22	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	25	136
Future Volume (vph)	25	136
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.99
Frt		0.850
Flt Protected	0.966	
Satd. Flow (prot)	1835	1615
Flt Permitted	0.774	
Satd. Flow (perm)	1471	1595
Right Turn on Red		Yes
Satd. Flow (RTOR)		147
Link Speed (mph)	25	
Link Distance (ft)	361	
Travel Time (s)	9.8	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	26	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	91	139
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		33.0
Total Split (s)	19.8	19.8	40.7		19.8	19.8	40.7		16.5	33.0		34.5
Total Split (%)	17.8%	17.8%	36.5%		17.8%	17.8%	36.5%		14.8%	29.6%		30.9%
Maximum Green (s)	16.3	16.3	35.2		16.3	16.3	35.2		13.0	27.5		29.0
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	77.8			77.8	70.9		22.0	21.2	111.5	
Actuated g/C Ratio		0.75	0.70			0.70	0.64		0.20	0.19	1.00	
v/c Ratio		0.37	0.27			0.10	0.35		0.20	0.06	0.02	
Control Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		7.8	9.3			6.7	12.3		34.2	33.1	0.0	
LOS		A	A			A	B		C	C	A	
Approach Delay (s/veh)			9.0				12.0			22.6		
Approach LOS			A				B			C		
Queue Length 50th (ft)		36	107			8	138		28	13	0	
Queue Length 95th (ft)		76	165			23	230		55	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		594	3541			591	2256		300	775	1588	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.31	0.27			0.07	0.35		0.16	0.03	0.02	

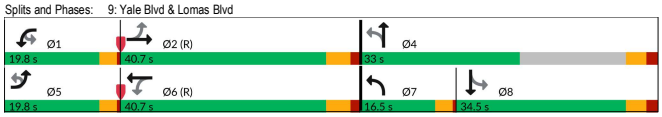
Intersection Summary	
Area Type:	Other
Cycle Length: 111.5	
Actuated Cycle Length: 111.5	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	Free
Protected Phases	8	
Permitted Phases		Free
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	34.5	
Total Split (%)	30.9%	
Maximum Green (s)	29.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	12.3	111.5
Actuated g/C Ratio	0.11	1.00
v/c Ratio	0.56	0.09
Control Delay (s/veh)	59.7	0.1
Queue Delay	0.0	0.0
Total Delay (s/veh)	59.7	0.1
LOS	E	A
Approach Delay (s/veh)	23.7	
Approach LOS	C	
Queue Length 50th (ft)	63	0
Queue Length 95th (ft)	112	0
Internal Link Dist (ft)	281	
Turn Bay Length (ft)		
Base Capacity (vph)	382	1595
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.24	0.09

Intersection Summary	

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



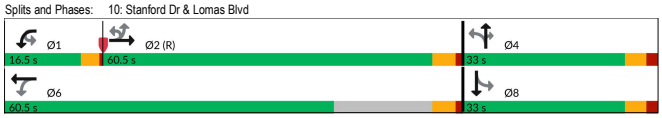
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Future Volume (vph)	1	9	868	102	7	45	716	9	75	0	44	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.99	1.00			0.99	0.97	
Frt			0.984				0.998				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5087	0	0	1805	3598	0	0	1805	1615	0
Flt Permitted		0.371				0.259				0.748		
Satd. Flow (perm)	0	680	5087	0	0	485	3598	0	0	1401	1573	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			27				2				55	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	15	15		15	27	27		27	13		13	8
Confl. Bikes (#/hr)				1				14			1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	9	886	104	7	46	731	9	77	0	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	990	0	0	53	740	0	0	77	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	Perm
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	7
Future Volume (vph)	0	7
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.932	
Flt Protected	0.976	
Satd. Flow (prot)	1710	0
Flt Permitted	0.836	
Satd. Flow (perm)	1459	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	55	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	7
Shared Lane Traffic (%)		
Lane Group Flow (vph)	14	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (s)	60.5	60.5	60.5		16.5	16.5	60.5		33.0	33.0	33.0	33.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	55.5	55.5	55.5		13.0	13.0	55.5		27.5	27.5	27.5	27.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	17.0	17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		84.6	84.6			92.1	91.6			11.6	11.6	
Actuated g/C Ratio		0.77	0.77			0.84	0.83			0.11	0.11	
v/c Ratio		0.02	0.25			0.11	0.25			0.52	0.21	
Control Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		5.6	5.1			2.5	2.6			58.7	11.1	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			5.1				2.6			41.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		2	73			4	32			53	0	
Queue Length 95th (ft)		8	112			m13	73			98	26	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		522	3917			562	2997			350	434	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.02	0.25			0.09	0.25			0.22	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 6.3		Intersection LOS: A	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	30.0%	
Maximum Green (s)	27.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.6	
Actuated g/C Ratio	0.11	
v/c Ratio	0.07	
Control Delay (s/veh)	0.6	
Queue Delay	0.0	
Total Delay (s/veh)	0.6	
LOS	A	
Approach Delay (s/veh)	0.6	
Approach LOS	A	
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	406	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.03	
Intersection Summary		

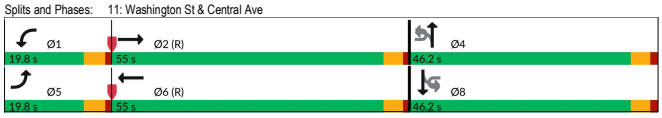
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	27	369	15	12	27	400	20	27	169	28	22
Future Volume (vph)	8	27	369	15	12	27	400	20	27	169	28	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00				1.00		1.00	1.00		0.99
Frt			0.994				0.993			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1883	0	0	1805	1885	0	1805	1851	0	1805
Flt Permitted		0.288				0.276			0.374			0.357
Satd. Flow (perm)	0	524	1883	0	0	524	1885	0	707	1851	0	669
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			699		
Travel Time (s)			26.6				18.1			15.9		
Confl. Peds. (#/hr)	19	19		19					3		3	10
Confl. Bikes (#/hr)				2				2				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	28	377	15	12	28	408	20	28	172	29	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	392	0	0	40	428	0	28	201	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	160	31
Future Volume (vph)	160	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.975	
Flt Protected		
Satd. Flow (prot)	1840	0
Flt Permitted		
Satd. Flow (perm)	1840	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		10
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	163	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	195	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	46.2	17.6	46.2		46.2	17.6	46.2		46.2	46.2		46.2
Total Split (s)	46.2	19.8	55.0		46.2	19.8	55.0		46.2	46.2		46.2
Total Split (%)	38.2%	16.4%	45.5%		38.2%	16.4%	45.5%		38.2%	38.2%		38.2%
Maximum Green (s)	41.2	14.8	50.5		41.2	14.8	50.5		41.2	41.2		41.2
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		15.2	74.9			15.9	75.5		18.2	18.2		18.2
Actuated g/C Ratio		0.13	0.62			0.13	0.62		0.15	0.15		0.15
v/c Ratio		0.55	0.34			0.59	0.36		0.27	0.71		0.22
Control Delay (s/veh)		77.1	15.1			79.8	15.1		49.8	60.0		48.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		77.1	15.1			79.8	15.1		49.8	60.0		48.2
LOS		E	B			E	B		D	E		D
Approach Delay (s/veh)			20.3				20.6			58.7		
Approach LOS			C				C			E		
Queue Length 50th (ft)		27	146			30	160		20	145		15
Queue Length 95th (ft)		61	281			66	309		47	214		40
Internal Link Dist (ft)			1288				848			619		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		76	1165			78	1176		240	635		227
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.47	0.34			0.51	0.36		0.12	0.32		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 121			
Actuated Cycle Length: 121			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 33.0		Intersection LOS: C	
Intersection Capacity Utilization 59.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	46.2	
Total Split (s)	46.2	
Total Split (%)	38.2%	
Maximum Green (s)	41.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.2	
Actuated g/C Ratio	0.15	
v/c Ratio	0.69	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	57.4	
Approach LOS	E	
Queue Length 50th (ft)	140	
Queue Length 95th (ft)	207	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	632	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.31	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	17	15	392	13	4	12	440	5	19	12	8	10
Future Volume (vph)	17	15	392	13	4	12	440	5	19	12	8	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.995				0.998			0.972		
Flt Protected		0.950				0.950				0.976		
Satd. Flow (prot)	0	1805	1888	0	0	1805	1896	0	0	1789	0	0
Flt Permitted		0.374				0.714				0.850		
Satd. Flow (perm)	0	700	1888	0	0	1347	1896	0	0	1552	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1			8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	9	9		9	4	4		4	6		6	6
Confl. Bikes (#/hr)								2			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	15	400	13	4	12	449	5	19	12	8	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	413	0	0	16	454	0	0	39	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

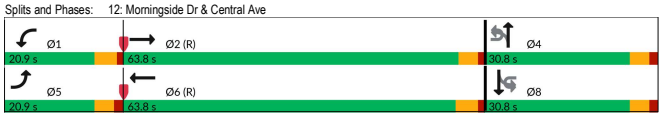
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	37	10
Future Volume (vph)	37	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.977	
Flt Protected	0.991	
Satd. Flow (prot)	1829	0
Flt Permitted	0.943	
Satd. Flow (perm)	1738	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	8	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	38	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	58	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	6.0	16.0		6.0	4.0	16.0		1.0	1.0		6.0
Minimum Split (s)	30.8	20.9	58.3		30.8	20.9	58.3		30.8	30.8		30.8
Total Split (s)	30.8	20.9	63.8		30.8	20.9	63.8		30.8	30.8		30.8
Total Split (%)	26.7%	18.1%	55.2%		26.7%	18.1%	55.2%		26.7%	26.7%		26.7%
Maximum Green (s)	25.8	15.9	59.3		25.8	15.9	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		13.7	92.8			9.8	86.4			8.5		
Actuated g/C Ratio		0.12	0.80			0.08	0.75			0.07		
v/c Ratio		0.39	0.27			0.14	0.32			0.32		
Control Delay (s/veh)		57.5	5.8			49.1	9.0			48.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		57.5	5.8			49.1	9.0			48.5		
LOS		E	A			D	A			D		
Approach Delay (s/veh)			9.5				10.3			48.5		
Approach LOS			A				B			D		
Queue Length 50th (ft)		22	44			11	128			22		
Queue Length 95th (ft)		52	191			32	254			56		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		106	1517			185	1418			352		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.27			0.09	0.32			0.11		

Intersection Summary

Area Type: Other
Cycle Length: 115.5
Actuated Cycle Length: 115.5
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 44.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.7%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	53.4	
Queue Delay	0.0	
Total Delay (s/veh)	53.4	
LOS	D	
Approach Delay (s/veh)	53.4	
Approach LOS	D	
Queue Length 50th (ft)	36	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	394	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.15	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	15	73	331	38	8	41	404	46	40	159	26	58
Future Volume (vph)	15	73	331	38	8	41	404	46	40	159	26	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95		0.99		0.97	0.99	0.99		0.99
Frt				0.850				0.850		0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1850	0	1805
Flt Permitted		0.149				0.305			0.395			0.409
Satd. Flow (perm)	0	277	1900	1531	0	573	1900	1565	742	1850	0	769
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				113				113		8		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	10	10		10	4	4		4	10		10	7
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	74	338	39	8	42	412	47	41	162	27	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	338	39	0	50	412	47	41	189	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	173	54
Future Volume (vph)	173	54
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.964	
Flt Protected		
Satd. Flow (prot)	1817	0
Flt Permitted		
Satd. Flow (perm)	1817	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	177	55
Shared Lane Traffic (%)		
Lane Group Flow (vph)	232	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	40.0	40.0	13.2	36.3		13.2
Total Split (s)	16.5	16.5	44.0	44.0	16.5	16.5	42.9	42.9	13.2	37.4		13.2
Total Split (%)	14.9%	14.9%	39.6%	39.6%	14.9%	14.9%	38.6%	38.6%	11.9%	33.7%		11.9%
Maximum Green (s)	11.5	11.5	39.0	39.0	11.5	11.5	37.9	37.9	8.7	32.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.8	55.9	55.9		14.6	41.1	41.1	24.7	18.0		26.2
Actuated g/C Ratio		0.24	0.50	0.50		0.13	0.37	0.37	0.22	0.16		0.24
v/c Ratio		1.33	0.35	0.05		0.67	0.59	0.07	0.18	0.62		0.23
Control Delay (s/veh)		260.9	22.7	0.1		84.2	33.0	0.2	28.8	49.4		30.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		260.9	22.7	0.1		84.2	33.0	0.2	28.8	49.4		30.0
LOS		F	C	A		F	C	A	C	D		C
Approach Delay (s/veh)			66.3				35.0			45.7		
Approach LOS			E				D			D		
Queue Length 50th (ft)		~83	159	0		34	241	0	22	122		31
Queue Length 95th (ft)		#203	278	0		#84	348	0	44	181		58
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		67	955	825		79	703	650	253	545		263
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.33	0.35	0.05		0.63	0.59	0.07	0.16	0.35		0.22

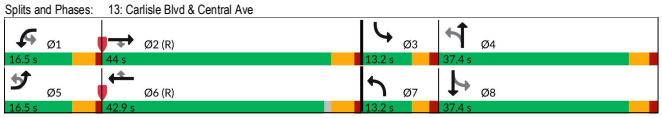
Intersection Summary
Area Type: Other
Cycle Length: 111.1
Actuated Cycle Length: 111.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay (s/veh): 48.3 Intersection LOS: D
Intersection Capacity Utilization 60.9% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.3	
Total Split (s)	37.4	
Total Split (%)	33.7%	
Maximum Green (s)	32.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	20.6	
Actuated g/C Ratio	0.19	
v/c Ratio	0.67	
Control Delay (s/veh)	48.8	
Queue Delay	0.0	
Total Delay (s/veh)	48.8	
LOS	D	
Approach Delay (s/veh)	45.0	
Approach LOS	D	
Queue Length 50th (ft)	149	
Queue Length 95th (ft)	219	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	539	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	6	14	434	26	5	18	469	20	14	8	14	18
Future Volume (vph)	6	14	434	26	5	18	469	20	14	8	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.91	0.99			0.99		
Frt			0.991				0.994			0.947		
Flt Protected		0.950				0.950				0.981		
Satd. Flow (prot)	0	1805	1877	0	0	1805	1875	0	0	1749	0	0
Flt Permitted		0.656				0.588				0.912		
Satd. Flow (perm)	0	1218	1877	0	0	1022	1875	0	0	1626	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				3			14		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	12	12		12	45	45		45				51
Confl. Bikes (#/hr)				2							2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	14	443	27	5	18	479	20	14	8	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	470	0	0	23	499	0	0	36	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	9	14
Future Volume (vph)	9	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.91	
Frt	0.954	
Flt Protected	0.979	
Satd. Flow (prot)	1697	0
Flt Permitted	0.870	
Satd. Flow (perm)	1442	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		51
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	9	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		5.0	5.0	16.0		8.0	8.0		8.0
Minimum Split (s)	19.8	19.8	57.2		19.8	19.8	57.2		33.0	33.0		33.0
Total Split (s)	19.8	19.8	61.6		19.8	19.8	61.6		33.0	33.0		33.0
Total Split (%)	17.3%	17.3%	53.8%		17.3%	17.3%	53.8%		28.8%	28.8%		28.8%
Maximum Green (s)	15.3	15.3	56.6		15.3	15.3	56.6		28.0	28.0		28.0
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.5	94.3			11.6	95.0			8.7		
Actuated g/C Ratio		0.09	0.82			0.10	0.83			0.08		
v/c Ratio		0.18	0.30			0.22	0.32			0.26		
Control Delay (s/veh)		53.4	3.8			49.5	6.0			39.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		53.4	3.8			49.5	6.0			39.3		
LOS		D	A			D	A			D		
Approach Delay (s/veh)			5.9				7.9			39.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		15	48			16	56			16		
Queue Length 95th (ft)		41	96			39	244			48		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		166	1548			143	1557			408		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.12	0.30			0.16	0.32			0.09		

Intersection Summary

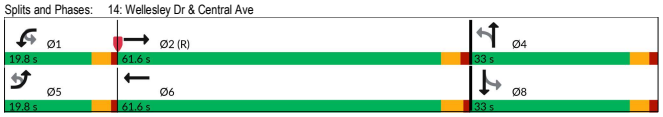
Area Type: Other
Cycle Length: 114.4
Actuated Cycle Length: 114.4
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.34

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.0	
Total Split (s)	33.0	
Total Split (%)	28.8%	
Maximum Green (s)	28.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.34	
Control Delay (s/veh)	43.8	
Queue Delay	0.0	
Total Delay (s/veh)	43.8	
LOS	D	
Approach Delay (s/veh)	43.8	
Approach LOS	D	
Queue Length 50th (ft)	19	
Queue Length 95th (ft)	54	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	363	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.11	

Intersection Summary

Intersection Signal Delay (s/veh): 9.4	Intersection LOS: A
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	8	12	451	27	6	20	408	7	16	16	18	10
Future Volume (vph)	8	12	451	27	6	20	408	7	16	16	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00				1.00			0.95		
Frt			0.991				0.998			0.951		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1722	1879	0	0	1805	1876	0	0	1714	0	0
Flt Permitted		0.656				0.449				0.907		
Satd. Flow (perm)	0	1177	1879	0	0	853	1876	0	0	1559	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				1			18		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	5	5		5	6	6		6	34		34	18
Confl. Bikes (#/hr)				1				2			2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	8%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	12	460	28	6	20	416	7	16	16	18	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	488	0	0	26	423	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	23	6
Future Volume (vph)	23	6
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.979	
Flt Protected	0.987	
Satd. Flow (prot)	1825	0
Flt Permitted	0.932	
Satd. Flow (perm)	1706	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		18
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	6
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

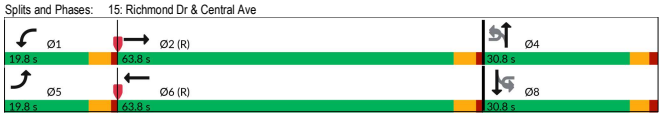
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		1.0	4.0	16.0		1.0	1.0		1.0
Minimum Split (s)	30.8	19.8	59.4		30.8	19.8	59.4		30.8	30.8		30.8
Total Split (s)	30.8	19.8	63.8		30.8	19.8	63.8		30.8	30.8		30.8
Total Split (%)	26.9%	17.3%	55.8%		26.9%	17.3%	55.8%		26.9%	26.9%		26.9%
Maximum Green (s)	25.8	14.8	58.8		25.8	14.8	58.8		25.8	25.8		25.8
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.6	87.7			11.6	91.5			7.8		
Actuated g/C Ratio		0.09	0.77			0.10	0.80			0.07		
v/c Ratio		0.18	0.34			0.30	0.28			0.41		
Control Delay (s/veh)		49.0	7.8			64.4	3.5			45.3		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		49.0	7.8			64.4	3.5			45.3		
LOS		D	A			E	A			D		
Approach Delay (s/veh)			9.5				7.0			45.3		
Approach LOS			A				A			D		
Queue Length 50th (ft)		14	125			19	35			23		
Queue Length 95th (ft)		36	253			52	71			61		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		157	1441			116	1501			365		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.13	0.34			0.22	0.28			0.14		

Intersection Summary	
Area Type:	Other
Cycle Length: 114.4	
Actuated Cycle Length: 114.4	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	1.0	
Minimum Split (s)	30.8	
Total Split (s)	30.8	
Total Split (%)	26.9%	
Maximum Green (s)	25.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	7.8	
Actuated g/C Ratio	0.07	
v/c Ratio	0.32	
Control Delay (s/veh)	50.6	
Queue Delay	0.0	
Total Delay (s/veh)	50.6	
LOS	D	
Approach Delay (s/veh)	50.6	
Approach LOS	D	
Queue Length 50th (ft)	24	
Queue Length 95th (ft)	57	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	389	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.10	
Intersection Summary		

Intersection Signal Delay (s/veh): 11.7	Intersection LOS: B
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	19	37	574	32	14	36	573	20	9	14	23	24
Future Volume (vph)	19	37	574	32	14	36	573	20	9	14	23	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.97		
Frt			0.992				0.995			0.932		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	3567	0	0	1805	3580	0	0	1713	0	0
Flt Permitted		0.154				0.191				0.942		
Satd. Flow (perm)	0	293	3567	0	0	363	3580	0	0	1620	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				4			23		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	16	16		16	7	7		7	27		27	12
Confl. Bikes (#/hr)				3				5			4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	19	38	586	33	14	37	585	20	9	14	23	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	619	0	0	51	605	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	14	19
Future Volume (vph)	14	19
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.955	
Flt Protected	0.979	
Satd. Flow (prot)	1760	0
Flt Permitted	0.896	
Satd. Flow (perm)	1601	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	19	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		12
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	14	19
Shared Lane Traffic (%)		
Lane Group Flow (vph)	57	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		1.0	1.0		8.0
Minimum Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (s)	25.3	25.3	49.5		25.3	25.3	49.5		35.2	35.2		35.2
Total Split (%)	23.0%	23.0%	45.0%		23.0%	23.0%	45.0%		32.0%	32.0%		32.0%
Maximum Green (s)	20.8	20.8	45.0		20.8	20.8	45.0		30.2	30.2		30.2
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		26.0	70.4			22.7	63.5			8.6		
Actuated g/C Ratio		0.24	0.64			0.21	0.58			0.08		
v/c Ratio		0.83	0.27			0.68	0.29			0.31		
Control Delay (s/veh)		120.1	8.2			78.7	14.9			33.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		120.1	8.2			78.7	14.9			33.8		
LOS		F	A			E	B			C		
Approach Delay (s/veh)			17.6				19.8			33.8		
Approach LOS			B				B			C		
Queue Length 50th (ft)		42	60			33	114			16		
Queue Length 95th (ft)		#99	81			73	197			51		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		73	2286			84	2067			461		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.78	0.27			0.61	0.29			0.10		

Intersection Summary
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

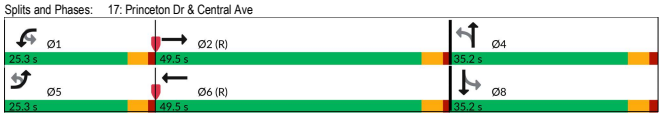
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	35.2	
Total Split (s)	35.2	
Total Split (%)	32.0%	
Maximum Green (s)	30.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.1	
Actuated g/C Ratio	0.08	
v/c Ratio	0.38	
Control Delay (s/veh)	41.6	
Queue Delay	0.0	
Total Delay (s/veh)	41.6	
LOS	D	
Approach Delay (s/veh)	41.6	
Approach LOS	D	
Queue Length 50th (ft)	26	
Queue Length 95th (ft)	65	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	453	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	

Intersection Summary

Intersection Signal Delay (s/veh): 20.1		Intersection LOS: C	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	23	598	18	22	19	571	5	2	13	20	8
Future Volume (vph)	3	23	598	18	22	19	571	5	2	13	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		145		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							1.00			0.97		0.98
Frt			0.996				0.999			0.923		
Flt Protected		0.950				0.950				0.997		0.950
Satd. Flow (prot)	0	1805	3561	0	0	1805	3606	0	0	1701	0	1805
Flt Permitted		0.440				0.272				0.977		0.734
Satd. Flow (perm)	0	836	3561	0	0	517	3606	0	0	1664	0	1373
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3				1			20		
Link Speed (mph)			30				30			30		
Link Distance (ft)			378				743			579		
Travel Time (s)			8.6				16.9			13.2		
Confl. Peds. (#/hr)					13	13		13	26		26	14
Confl. Bikes (#/hr)								1			8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	23	610	18	22	19	583	5	2	13	20	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	628	0	0	41	588	0	0	35	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		20	36		36
Trailing Detector (ft)	0	2	0		0	2	0		0	2		2
Detector 1 Position(ft)	0	2	0		0	2	0		0	2		2
Detector 1 Size(ft)	20	34	6		20	34	6		20	34		34
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	6	14
Future Volume (vph)	6	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.895	
Flt Protected		
Satd. Flow (prot)	1666	0
Flt Permitted		
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	14	
Link Speed (mph)	30	
Link Distance (ft)	153	
Travel Time (s)	3.5	
Confl. Peds. (#/hr)		14
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	20	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	34	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (s)	34.1	20.9	55.0		34.1	20.9	55.0		34.1	34.1		34.1
Total Split (%)	31.0%	19.0%	50.0%		31.0%	19.0%	50.0%		31.0%	31.0%		31.0%
Maximum Green (s)	29.1	15.9	50.5		29.6	16.4	50.0		29.1	29.1		29.6
Yellow Time (s)	3.5	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		0.0
Total Lost Time (s)		5.0	4.5			4.5	5.0			5.0		4.5
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	22.0		8.0		21.0		19.0		22.0	22.0		21.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		11.7	80.1			16.0	86.9			8.2		8.5
Actuated g/C Ratio		0.11	0.73			0.15	0.79			0.07		0.08
v/c Ratio		0.29	0.24			0.55	0.21			0.24		0.08
Control Delay (s/veh)		51.0	8.0			73.6	3.1			31.8		48.3
Queue Delay		0.0	0.3			0.0	0.0			0.0		0.0
Total Delay (s/veh)		51.0	8.3			73.6	3.1			31.8		48.3
LOS		D	A			E	A			C		D
Approach Delay (s/veh)			10.0				7.7			31.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		17	88			31	32			10		5
Queue Length 95th (ft)		43	154			m68	43			42		21
Internal Link Dist (ft)			298				663			499		
Turn Bay Length (ft)		145				100						
Base Capacity (vph)		125	2593			89	2849			454		369
Starvation Cap Reductn		0	1212			0	0			0		0
Spillback Cap Reductn		0	0			0	0			0		0
Storage Cap Reductn		0	0			0	0			0		0
Reduced v/c Ratio		0.21	0.45			0.46	0.21			0.08		0.02

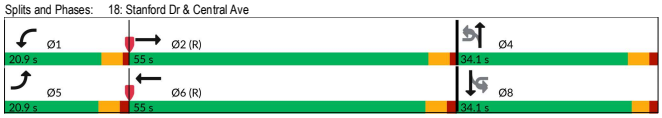
Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	34.1	
Total Split (%)	31.0%	
Maximum Green (s)	29.6	
Yellow Time (s)	3.0	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	4.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.14	
Control Delay (s/veh)	28.7	
Queue Delay	0.0	
Total Delay (s/veh)	28.7	
LOS	C	
Approach Delay (s/veh)	34.3	
Approach LOS	C	
Queue Length 50th (ft)	4	
Queue Length 95th (ft)	28	
Internal Link Dist (ft)	73	
Turn Bay Length (ft)		
Base Capacity (vph)	458	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.04	
Intersection Summary		

Intersection Signal Delay (s/veh): 10.0	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Stanford Dr & Central Ave



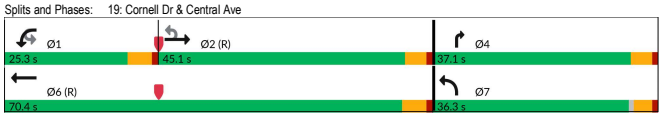
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	1	587	131	4	59	544	55	49
Future Volume (vph)	1	587	131	4	59	544	55	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		60		0	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor		0.96					0.93	
Frt		0.973						0.850
Flt Protected					0.950		0.950	
Satd. Flow (prot)	0	3359	0	0	1805	3610	1805	1583
Flt Permitted		0.955			0.141		0.950	
Satd. Flow (perm)	0	3207	0	0	268	3610	1682	1583
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		29						50
Link Speed (mph)		30				30	30	
Link Distance (ft)		750				378	329	
Travel Time (s)		17.0				8.6	7.5	
Confl. Peds. (#/hr)	70		70	102	102		70	70
Confl. Bikes (#/hr)			4					5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	1	599	134	4	60	555	56	50
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	734	0	0	64	555	56	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template	Left	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	20	100		20	25	100	36	36
Trailing Detector (ft)	0	0		0	15	0	4	4
Detector 1 Position(ft)	0	0		0	15	0	4	4
Detector 1 Size(ft)	20	6		20	10	6	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								

Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)		0.0				0.0		
Turn Type	Perm	NA		custom	Prot	NA	Prot	Prot
Protected Phases		2			1	6	7	4
Permitted Phases	2			1				
Detector Phase	2	2		1	1	6	7	4
Switch Phase								
Minimum Initial (s)	13.2	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	36.3
Total Split (s)	45.1	45.1		25.3	25.3	70.4	36.3	37.1
Total Split (%)	42.0%	42.0%		23.5%	23.5%	65.5%	33.8%	34.5%
Maximum Green (s)	40.6	40.6		20.3	20.3	65.4	32.3	32.6
Yellow Time (s)	3.5	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0	7.0				7.0		
Flash Don't Walk (s)	10.0	10.0				0.0		
Pedestrian Calls (#/hr)	0	0				0		
Act Effct Green (s)		58.7			28.3	92.5	8.9	9.0
Actuated g/C Ratio		0.55			0.26	0.86	0.08	0.08
v/c Ratio		0.42			0.91	0.18	0.38	0.28
Control Delay (s/veh)		17.1			123.8	1.9	53.2	16.8
Queue Delay		0.0			0.0	0.3	0.0	0.0
Total Delay (s/veh)		17.1			123.8	2.2	53.2	16.8
LOS		B			F	A	D	B
Approach Delay (s/veh)		17.1				14.8	36.0	
Approach LOS		B				B	D	
Queue Length 50th (ft)		151			42	27	37	0
Queue Length 95th (ft)		250			#113	47	76	36
Internal Link Dist (ft)		670				298	249	
Turn Bay Length (ft)					60			
Base Capacity (vph)		1763			72	3106	555	514
Starvation Cap Reductn		0			0	1865	0	0
Spillback Cap Reductn		0			0	0	0	0
Storage Cap Reductn		0			0	0	0	0
Reduced v/c Ratio		0.42			0.89	0.45	0.10	0.10

Intersection Summary	
Area Type:	Other
Cycle Length: 107.5	
Actuated Cycle Length: 107.5	
Offset: 22.5 (21%), Referenced to phase 2:EBTU and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	

Intersection Signal Delay (s/veh): 17.5		Intersection LOS: B	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	11	582	96	13	84	498	9	118	23	87	12
Future Volume (vph)	4	11	582	96	13	84	498	9	118	23	87	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		120		0	80		80	0
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93	0.98				1.00		0.99		0.97	0.99
Frt			0.979				0.997				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3468	0	0	1805	3588	0	1805	1900	1615	1805
Flt Permitted		0.833				0.076			0.405			0.742
Satd. Flow (perm)	0	1466	3468	0	0	144	3588	0	763	1900	1572	1389
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			15				2				132	
Link Speed (mph)			30				30			25		
Link Distance (ft)			1412				750			1232		
Travel Time (s)			32.1				17.0			33.6		
Confl. Peds. (#/hr)	32	32		32	52	52		52	7		7	11
Confl. Bikes (#/hr)				2				2			6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	11	594	98	13	86	508	9	120	23	89	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	692	0	0	99	517	0	120	23	89	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane										Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	36	100		30	30	30	35
Trailing Detector (ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Position(ft)	0	1	0		0	2	0		3	3	3	3
Detector 1 Size(ft)	20	35	6		20	34	6		27	27	27	32
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	19	5
Future Volume (vph)	19	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.969	
Flt Protected		
Satd. Flow (prot)	1830	0
Flt Permitted		
Satd. Flow (perm)	1830	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	5	
Link Speed (mph)	25	
Link Distance (ft)	105	
Travel Time (s)	2.9	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	19	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	32	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4		4	8
Detector Phase	5	5	2		1	1	6		7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		4.0	4.0	12.0		4.0	8.0	8.0	4.0
Minimum Split (s)	15.4	15.4	38.5		22.0	22.0	45.1		13.2	36.3	36.3	13.2
Total Split (s)	15.4	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4
Total Split (%)	11.0%	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%
Maximum Green (s)	10.4	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	None
Walk Time (s)			7.0				7.0			7.0	7.0	
Flash Don't Walk (s)			15.0				16.0			24.0	24.0	
Pedestrian Calls (#/hr)			0				0			0	0	
Act Effct Green (s)		8.9	51.0			52.3	101.5		21.7	16.8	16.8	11.3
Actuated g/C Ratio		0.06	0.36			0.37	0.73		0.16	0.12	0.12	0.08
v/c Ratio		0.16	0.54			1.87	0.20		0.55	0.10	0.29	0.09
Control Delay (s/veh)		55.1	39.0			474.9	8.6		60.8	54.3	4.6	47.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		55.1	39.0			474.9	8.6		60.8	54.3	4.6	47.3
LOS		E	D			F	A		E	D	A	D
Approach Delay (s/veh)			39.4				83.5			38.6		
Approach LOS			D				F			D		
Queue Length 50th (ft)		12	216			~142	70		95	17	0	9
Queue Length 95th (ft)		m17	m303			#231	148		153	47	16	27
Internal Link Dist (ft)			1332				670			1152		
Turn Bay Length (ft)		160				120			80		80	
Base Capacity (vph)		115	1272			53	2603		248	483	498	184
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.13	0.54			1.87	0.20		0.48	0.05	0.18	0.07

Intersection Summary
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.87

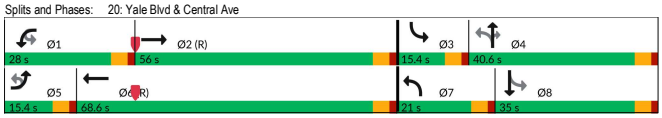
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	34.1	
Total Split (s)	35.0	
Total Split (%)	25.0%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.06	
v/c Ratio	0.21	
Control Delay (s/veh)	57.5	
Queue Delay	0.0	
Total Delay (s/veh)	57.5	
LOS	E	
Approach Delay (s/veh)	54.1	
Approach LOS	D	
Queue Length 50th (ft)	17	
Queue Length 95th (ft)	48	
Internal Link Dist (ft)	25	
Turn Bay Length (ft)		
Base Capacity (vph)	396	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.06	

Intersection Summary

Intersection Signal Delay (s/veh): 56.7 Intersection LOS: E
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Future Volume (vph)	15	49	381	18	20	46	375	213	1	32	283	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0		140		0
Storage Lanes		1		0		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.91	1.00	0.91	0.91
Ped Bike Factor		1.00	1.00			0.97	0.98			0.94	0.99	
Frt			0.993				0.946				0.967	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	1885	0	0	1805	3358	0	0	1805	4971	0
Flt Permitted		0.116				0.108				0.503		
Satd. Flow (perm)	0	220	1885	0	0	200	3358	0	0	901	4971	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			2				86				50	
Link Speed (mph)			30				30				30	
Link Distance (ft)			1782				1412				1118	
Travel Time (s)			40.5				32.1				25.4	
Confl. Peds. (#/hr)	4	4		4	23	23		23	20	20		20
Confl. Bikes (#/hr)				1				6				2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	50	389	18	20	47	383	217	1	33	289	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	407	0	0	67	600	0	0	34	371	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2		1	1	2		1	1	1	
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	20	36	100		20	36	100		20	40	40	
Trailing Detector (ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Position(ft)	0	2	0		0	0	0		0	0	0	
Detector 1 Size(ft)	20	34	6		20	36	6		20	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	266	344	57
Future Volume (vph)	266	344	57
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	140		0
Storage Lanes	1		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	0.91	0.91
Ped Bike Factor	0.99	0.99	
Frt		0.979	
Flt Protected	0.950		
Satd. Flow (prot)	1787	5039	0
Flt Permitted	0.279		
Satd. Flow (perm)	521	5039	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		22	
Link Speed (mph)		30	
Link Distance (ft)		1079	
Travel Time (s)		24.5	
Confl. Peds. (#/hr)	9		9
Confl. Bikes (#/hr)			9
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	0%	0%
Adj. Flow (vph)	271	351	58
Shared Lane Traffic (%)			
Lane Group Flow (vph)	271	409	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	1	
Detector Template	Left	Thru	
Leading Detector (ft)	50	50	
Trailing Detector (ft)	1	1	
Detector 1 Position(ft)	1	1	
Detector 1 Size(ft)	49	49	
Detector 1 Type	Cl+Ex	Cl+Ex	
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		custom	pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5				1				7	4		
Detector Phase	5	5	2		1	1	6		7	7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	4.0	12.0	
Minimum Split (s)	14.3	14.3	37.4		17.6	17.6	37.4		12.1	12.1	31.9	
Total Split (s)	21.0	21.0	53.2		21.0	21.0	53.2		22.4	22.4	40.6	
Total Split (%)	15.0%	15.0%	38.0%		15.0%	15.0%	38.0%		16.0%	16.0%	29.0%	
Maximum Green (s)	16.0	16.0	48.2		16.0	16.0	48.2		17.4	17.4	35.6	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0	5.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Recall Mode	None	None	C-Max		None	None	C-Max		None	None	None	
Walk Time (s)			7.0				7.0				7.0	
Flash Don't Walk (s)			25.0				24.0				24.0	
Pedestrian Calls (#/hr)			0				0				0	
Act Effct Green (s)		34.5	48.9			36.9	51.3			22.1	14.7	
Actuated g/C Ratio		0.25	0.35			0.26	0.37			0.16	0.11	
v/c Ratio		1.20	0.62			1.29	0.47			0.18	0.66	
Control Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		234.7	42.5			261.5	27.7			38.9	57.6	
LOS		F	D			F	C			D	E	
Approach Delay (s/veh)			69.0				51.2				56.0	
Approach LOS			E				D				E	
Queue Length 50th (ft)		~74	301			~80	205			23	104	
Queue Length 95th (ft)		#175	424			#190	126			49	139	
Internal Link Dist (ft)			1702				1332				1038	
Turn Bay Length (ft)		225				215				140		
Base Capacity (vph)		54	660			52	1285			318	1301	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		1.20	0.62			1.29	0.47			0.11	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29

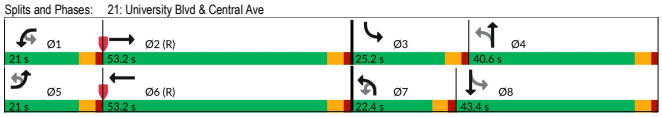
Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)			
Turn Type	pm+pt	NA	
Protected Phases	3	8	
Permitted Phases	8		
Detector Phase	3	8	
Switch Phase			
Minimum Initial (s)	4.0	12.0	
Minimum Split (s)	23.1	41.8	
Total Split (s)	25.2	43.4	
Total Split (%)	18.0%	31.0%	
Maximum Green (s)	20.2	38.4	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.0	5.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)		7.0	
Flash Don't Walk (s)		20.0	
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	39.1	31.1	
Actuated g/C Ratio	0.28	0.22	
v/c Ratio	0.84	0.36	
Control Delay (s/veh)	66.0	45.1	
Queue Delay	0.0	0.0	
Total Delay (s/veh)	66.0	45.1	
LOS	E	D	
Approach Delay (s/veh)		53.4	
Approach LOS		D	
Queue Length 50th (ft)	209	113	
Queue Length 95th (ft)	#318	148	
Internal Link Dist (ft)		999	
Turn Bay Length (ft)	140		
Base Capacity (vph)	328	1398	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.83	0.29	

Intersection Summary

Intersection Signal Delay (s/veh): 56.5	Intersection LOS: E
Intersection Capacity Utilization 79.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Future Volume (vph)	3	0	380	168	11	69	423	0	111	0	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98					0.98		0.98	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1599	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.503				0.459			0.950			
Satd. Flow (perm)	0	956	1900	1563	0	872	1900	0	1768	1900	1578	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				171							712	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	6	6		6					6		6	5
Confl. Bikes (#/hr)								3				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	388	171	11	70	432	0	113	0	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	388	171	0	81	432	0	113	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

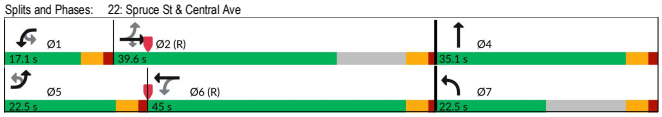
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	37.8	37.8	17.1	17.1	45.0		12.6	35.1		
Total Split (s)	22.5	22.5	39.6	39.6	17.1	17.1	45.0		22.5	35.1		
Total Split (%)	21.9%	21.9%	38.6%	38.6%	16.7%	16.7%	43.9%		21.9%	34.2%		
Maximum Green (s)	17.5	17.5	35.1	35.1	12.1	12.1	40.5		17.5	30.1		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		71.4	67.6	67.6		76.0	75.0		16.0		102.6	
Actuated g/C Ratio		0.70	0.66	0.66		0.74	0.73		0.16		1.00	
v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.40		0.05	
Control Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.7	8.9	1.5		3.8	6.0		43.8		0.1	
LOS		A	A	A		A	A		D		A	
Approach Delay (s/veh)			6.7				5.7			26.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		1	105	0		12	76		67		0	
Queue Length 95th (ft)		3	162	23		23	171		122		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		858	1251	1088		761	1388		529		1578	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.00	0.31	0.16		0.11	0.31		0.21		0.05	

Intersection Summary	
Area Type:	Other
Cycle Length: 102.6	
Actuated Cycle Length: 102.6	
Offset: 22.5 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.40	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Intersection Signal Delay (s/veh): 9.2	Intersection LOS: A
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	109	419	25	1	19	401	47	35	54	9	60
Future Volume (vph)	5	109	419	25	1	19	401	47	35	54	9	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		100		100		0	100		0	100
Storage Lanes		1		1		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98		0.99	1.00		1.00	1.00		
Frt				0.850			0.984			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	3610	1615	0	1805	3542	0	1805	1856	0	1805
Flt Permitted		0.458				0.503			0.550			0.715
Satd. Flow (perm)	0	870	3610	1581	0	951	3542	0	1044	1856	0	1358
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				95			20			9		
Link Speed (mph)			30				30			30		
Link Distance (ft)			353				364			345		
Travel Time (s)			8.0				8.3			7.8		
Confl. Peds. (#/hr)					3	3		3	2		2	
Confl. Bikes (#/hr)				1							1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	428	26	1	19	409	48	36	55	9	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	428	26	0	20	457	0	36	64	0	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100		20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	62	109
Future Volume (vph)	62	109
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt	0.904	
Flt Protected		
Satd. Flow (prot)	1718	0
Flt Permitted		
Satd. Flow (perm)	1718	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	111	
Link Speed (mph)	30	
Link Distance (ft)	289	
Travel Time (s)	6.6	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	63	111
Shared Lane Traffic (%)		
Lane Group Flow (vph)	174	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5	2		2	1	6			4			8
Detector Phase	5	5	2	2	1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	11.2	11.2	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (s)	11.2	11.2	33.8	33.8	11.2	11.2	33.8		30.0	30.0		30.0
Total Split (%)	14.9%	14.9%	45.1%	45.1%	14.9%	14.9%	45.1%		40.0%	40.0%		40.0%
Maximum Green (s)	7.7	7.7	29.3	29.3	7.2	7.2	29.8		24.5	24.5		24.5
Yellow Time (s)	3.0	3.0	3.5	3.5	3.5	3.5	3.0		3.5	3.5		3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	4.5	4.5		4.0	4.0		5.5	5.5		5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.0	1.0	4.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		None
Walk Time (s)			7.0	7.0			7.0		7.0	7.0		7.0
Flash Don't Walk (s)			15.0	15.0			10.0		30.0	30.0		26.0
Pedestrian Calls (#/hr)			0	0			0		0	0		0
Act Effct Green (s)		55.8	52.0	52.0		51.0	48.0		9.8	9.8		9.8
Actuated g/C Ratio		0.74	0.69	0.69		0.68	0.64		0.13	0.13		0.13
v/c Ratio		0.16	0.17	0.02		0.03	0.20		0.26	0.26		0.34
Control Delay (s/veh)		3.4	5.1	0.0		3.5	6.5		33.4	27.8		34.4
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		3.4	5.1	0.0		3.5	6.5		33.4	27.8		34.4
LOS		A	A	A		A	A		C	C		C
Approach Delay (s/veh)			4.6				6.4			29.8		
Approach LOS			A				A			C		
Queue Length 50th (ft)		10	22	0		2	38		16	24		27
Queue Length 95th (ft)		28	67	0		8	75		40	54		58
Internal Link Dist (ft)			273				284			265		
Turn Bay Length (ft)		100		100		100			100			100
Base Capacity (vph)		746	2502	1125		763	2273		341	612		443
Starvation Cap Reductn		0	0	0		0	0		0	0		0
Spillback Cap Reductn		0	0	0		0	0		0	0		0
Storage Cap Reductn		0	0	0		0	0		0	0		0
Reduced v/c Ratio		0.16	0.17	0.02		0.03	0.20		0.11	0.10		0.14

Intersection Summary

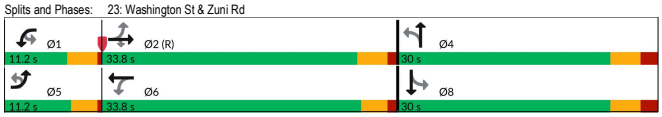
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	30.0	
Total Split (s)	30.0	
Total Split (%)	40.0%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	26.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.13	
v/c Ratio	0.54	
Control Delay (s/veh)	18.9	
Queue Delay	0.0	
Total Delay (s/veh)	18.9	
LOS	B	
Approach Delay (s/veh)	22.9	
Approach LOS	C	
Queue Length 50th (ft)	27	
Queue Length 95th (ft)	78	
Internal Link Dist (ft)	209	
Turn Bay Length (ft)		
Base Capacity (vph)	635	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.27	

Intersection Summary

Intersection Signal Delay (s/veh): 10.1	Intersection LOS: B
Intersection Capacity Utilization 52.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

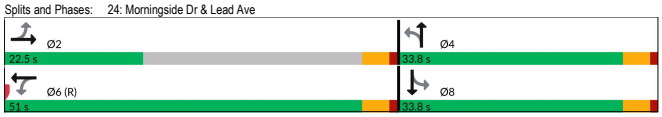


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	269	4	4	269	6	6	15	7	17	15	17
Future Volume (vph)	6	269	4	4	269	6	6	15	7	17	15	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99			0.98	
Frt		0.998			0.997			0.966			0.953	
Flt Protected		0.999			0.999			0.989			0.983	
Satd. Flow (prot)	0	1894	0	0	1891	0	0	1806	0	0	1759	0
Flt Permitted		0.994			0.997			0.967			0.932	
Satd. Flow (perm)	0	1885	0	0	1888	0	0	1765	0	0	1661	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			7			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			723			60			347	
Travel Time (s)		2.2			16.4			1.4			7.9	
Confl. Peds. (#/hr)				1		1				5		5
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	274	4	4	274	6	6	15	7	17	15	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	0	0	284	0	0	28	0	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		51.0	51.0		33.8	33.8		33.8	33.8	
Total Split (%)	26.5%	26.5%		60.1%	60.1%		39.9%	39.9%		39.9%	39.9%	
Maximum Green (s)	18.0	18.0		46.5	46.5		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		46.5			46.5			29.3			29.3	
Actuated g/C Ratio		0.55			0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.27			0.27			0.05			0.08	
Control Delay (s/veh)		11.0			11.0			15.4			14.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		11.0			11.0			15.4			14.1	
LOS		B			B			B			B	
Approach Delay (s/veh)		11.0			11.0			15.4			14.1	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		75			74			7			11	
Queue Length 95th (ft)		121			120			25			35	
Internal Link Dist (ft)		15			643			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1034			1036			614			585	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.27			0.05			0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



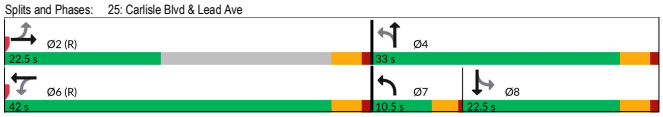
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	261	25	26	261	20	32	173	33	27	150	28
Future Volume (vph)	20	261	25	26	261	20	32	173	33	27	150	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.989			0.991			0.976			0.981	
Flt Protected		0.997			0.996		0.950				0.993	
Satd. Flow (prot)	0	1870	0	0	1875	0	1805	1848	0	0	1845	0
Flt Permitted		0.973			0.960		0.358				0.930	
Satd. Flow (perm)	0	1825	0	0	1808	0	680	1848	0	0	1727	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			15			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	266	26	27	266	20	33	177	34	28	153	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	312	0	0	313	0	33	211	0	0	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		3.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (%)	30.0%	30.0%		56.0%	56.0%		14.0%	44.0%		30.0%	30.0%	
Maximum Green (s)	18.0	18.0		37.5	37.5		7.0	28.5		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5			4.5		3.5	4.5			4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		1.5	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0			10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		49.1			49.1		17.9	16.9			13.0	
Actuated g/C Ratio		0.65			0.65		0.24	0.23			0.17	
v/c Ratio		0.26			0.26		0.14	0.49			0.68	
Control Delay (s/veh)		7.8			7.9		18.9	30.3			38.6	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay (s/veh)		7.8			7.9		18.9	30.3			38.6	
LOS		A			A		B	C			D	
Approach Delay (s/veh)		7.8			7.9			28.7			38.6	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)		41			41		17	101			88	
Queue Length 95th (ft)		132			134		10	41			144	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)		1196			1184		267	711			423	
Starvation Cap Reductn		0			0		0	0			0	
Spillback Cap Reductn		0			0		0	0			0	
Storage Cap Reductn		0			0		0	0			0	
Reduced v/c Ratio		0.26			0.26		0.12	0.30			0.50	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			

Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 25: Carlisle Blvd & Lead Ave



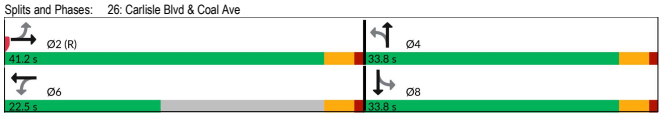
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	265	37	37	265	22	23	192	23	12	176	13
Future Volume (vph)	22	265	37	37	265	22	23	192	23	12	176	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				
Frt		0.984			0.991			0.987			0.990	
Flt Protected		0.997			0.994			0.995		0.950		
Satd. Flow (prot)	0	1859	0	0	1872	0	0	1862	0	1805	1881	0
Flt Permitted		0.971			0.940			0.955		0.389		
Satd. Flow (perm)	0	1810	0	0	1770	0	0	1787	0	739	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			8			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1366			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Bikes (#/hr)			5						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	270	38	38	270	22	23	196	23	12	180	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	330	0	0	330	0	0	242	0	12	193	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	10		10	10	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		51.7			51.7			14.3		14.3	14.3	
Actuated g/C Ratio		0.69			0.69			0.19		0.19	0.19	
v/c Ratio		0.26			0.27			0.70		0.09	0.53	
Control Delay (s/veh)		5.7			5.8			37.5		39.5	47.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay (s/veh)		5.7			5.8			37.5		39.5	47.9	
LOS		A			A			D		D	D	
Approach Delay (s/veh)		5.7			5.8			37.5			47.4	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)		47			47			102		6	94	
Queue Length 95th (ft)		103			105			158		m15	159	
Internal Link Dist (ft)		1422			1286			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1250			1221			702		288	738	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.26			0.27			0.34		0.04	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 20.4		Intersection LOS: C	

Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	292	4	4	291	6	4	17	4	2	15	3
Future Volume (vph)	7	292	4	4	291	6	4	17	4	2	15	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.997			0.978			0.980	
Flt Protected		0.999			0.999			0.992			0.995	
Satd. Flow (prot)	0	1894	0	0	1892	0	0	1843	0	0	1853	0
Flt Permitted		0.999			0.999			0.992			0.995	
Satd. Flow (perm)	0	1894	0	0	1892	0	0	1843	0	0	1853	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1366			754			657			532	
Travel Time (s)		31.0			17.1			14.9			12.1	
Confl. Bikes (#/hr)			3									2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	298	4	4	297	6	4	17	4	2	15	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	309	0	0	307	0	0	25	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			

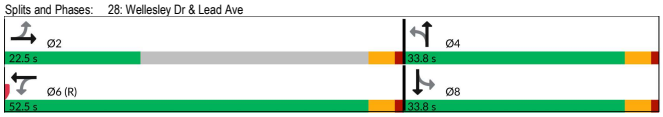
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	315	4	4	315	8	8	9	8	13	10	14
Future Volume (vph)	8	315	4	4	315	8	8	9	8	13	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99				
Frt		0.998			0.997			0.957			0.949	
Flt Protected		0.999			0.999			0.984			0.983	
Satd. Flow (prot)	0	1894	0	0	1891	0	0	1776	0	0	1772	0
Flt Permitted		0.992			0.997			0.950			0.938	
Satd. Flow (perm)	0	1881	0	0	1887	0	0	1714	0	0	1691	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			8			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				2		2	1		1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	321	4	4	321	8	8	9	8	13	10	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	333	0	0	333	0	0	25	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	
v/c Ratio		0.32			0.32			0.04			0.06	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		11.3			11.3			15.1			14.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		11.3			11.3			15.1			14.1	
LOS		B			B			B			B	
Approach Delay (s/veh)		11.3			11.3			15.1			14.1	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		91			90			6			8	
Queue Length 95th (ft)		142			141			23			29	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)		1046			1050			587			583	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.32			0.04			0.06	

Intersection Summary

Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave



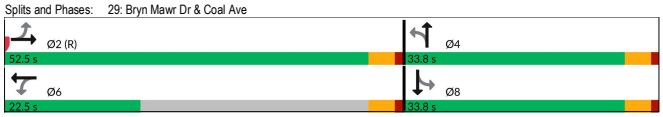
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	326	2	1	326	7	3	1	3	2	5	1
Future Volume (vph)	8	326	2	1	326	7	3	1	3	2	5	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98			1.00	
Frt		0.999			0.997			0.942			0.983	
Flt Protected		0.999						0.979			0.988	
Satd. Flow (prot)	0	1896	0	0	1893	0	0	1723	0	0	1840	0
Flt Permitted		0.992						0.957			0.976	
Satd. Flow (perm)	0	1882	0	0	1893	0	0	1672	0	0	1815	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			3			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)	4		4	1		1	7		7	2		2
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	333	2	1	333	7	3	1	3	2	5	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	343	0	0	341	0	0	7	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	52.5	52.5		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%		26.1%	26.1%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.33			0.32			0.01			0.01	
Control Delay (s/veh)		11.4			11.4			15.7			18.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		11.4			11.4			15.7			18.1	
LOS		B			B			B			B	
Approach Delay (s/veh)		11.4			11.4			15.7			18.1	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		94			93			1			2	
Queue Length 95th (ft)		147			145			11			12	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1047			1053			569			616	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.33			0.32			0.01			0.01	

Intersection Summary

Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 11.5		Intersection LOS: B	
Intersection Capacity Utilization 44.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave



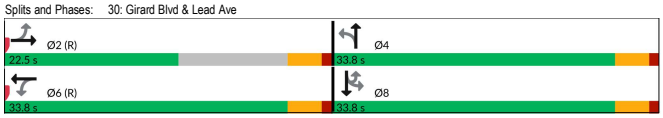
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	336	20	20	336	15	21	190	21	1	43	155
Future Volume (vph)	15	336	20	20	336	15	21	190	21	1	43	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				0.99
Frt		0.993			0.995			0.988				0.976
Flt Protected		0.998			0.997			0.996				0.991
Satd. Flow (prot)	0	1883	0	0	1883	0	0	1866	0	0	0	1830
Flt Permitted		0.983			0.975			0.955				0.853
Satd. Flow (perm)	0	1855	0	0	1842	0	0	1789	0	0	0	1573
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		5			4			9				20
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1133			1480			669				1373
Travel Time (s)		25.8			33.6			15.2				31.2
Confl. Peds. (#/hr)				1		1	1		1	2	2	
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	343	20	20	343	15	21	194	21	1	44	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	378	0	0	378	0	0	236	0	0	0	247
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		2			6			4				8

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	43
Future Volume (vph)	43
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	44
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Permitted Phases	2			6			4			8	8	
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	33.8
Total Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	33.8
Total Split (%)	33.3%	33.3%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0		29.3	29.3		29.3	29.3		29.3	29.3	29.3
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		4.5			4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		44.7			44.7			13.9				13.9
Actuated g/C Ratio		0.66			0.66			0.21				0.21
v/c Ratio		0.31			0.31			0.63				0.73
Control Delay (s/veh)		6.5			6.5			30.5				35.2
Queue Delay		0.0			0.0			0.0				0.0
Total Delay (s/veh)		6.5			6.5			30.5				35.2
LOS		A			A			C				D
Approach Delay (s/veh)		6.5			6.5			30.5				35.2
Approach LOS		A			A			C				D
Queue Length 50th (ft)		55			55			86				88
Queue Length 95th (ft)		124			124			135				142
Internal Link Dist (ft)		1053			1400			589				1293
Turn Bay Length (ft)												
Base Capacity (vph)		1229			1220			780				693
Starvation Cap Reductn		0			0			0				0
Spillback Cap Reductn		0			0			0				0
Storage Cap Reductn		0			0			0				0
Reduced v/c Ratio		0.31			0.31			0.30				0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 16.8		Intersection LOS: B	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

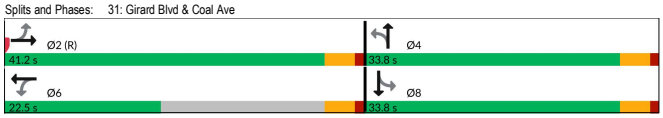
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	298	24	25	298	39	15	156	15	20	160	19
Future Volume (vph)	39	298	24	25	298	39	15	156	15	20	160	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.991			0.985			0.989			0.987	
Flt Protected		0.995			0.996			0.996			0.995	
Satd. Flow (prot)	0	1870	0	0	1864	0	0	1868	0	0	1862	0
Flt Permitted		0.938			0.965			0.963			0.950	
Satd. Flow (perm)	0	1763	0	0	1806	0	0	1806	0	0	1777	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			11			7			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	2		2				1		1	1		1
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	304	24	26	304	40	15	159	15	20	163	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	368	0	0	370	0	0	189	0	0	202	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		53.2			53.2			12.8			12.8	
Actuated g/C Ratio		0.71			0.71			0.17			0.17	
v/c Ratio		0.29			0.29			0.60			0.65	
Control Delay (s/veh)		16.2			5.1			35.3			37.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		16.2			5.1			35.3			37.5	
LOS		B			A			D			D	
Approach Delay (s/veh)		16.2			5.1			35.3			37.5	
Approach LOS		B			A			D			D	
Queue Length 50th (ft)		138			49			79			85	
Queue Length 95th (ft)		240			106			130			139	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1253			1285			709			699	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.29			0.29			0.27			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 19.6		Intersection LOS: B	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



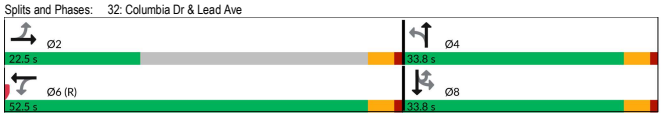
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	13	386	11	12	387	13	4	24	5	1	11	9
Future Volume (vph)	13	386	11	12	387	13	4	24	5	1	11	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				0.99
Frt		0.996			0.996			0.980				0.956
Flt Protected		0.998			0.999			0.994				0.981
Satd. Flow (prot)	0	1887	0	0	1891	0	0	1844	0	0	0	1768
Flt Permitted		0.985			0.987			0.984				0.932
Satd. Flow (perm)	0	1863	0	0	1868	0	0	1824	0	0	0	1677
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		3			3			5				10
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1197			1133			216				239
Travel Time (s)		27.2			25.8			4.9				5.4
Confl. Peds. (#/hr)	2		2				2		2	1	1	
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	394	11	12	395	13	4	24	5	1	11	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	418	0	0	420	0	0	33	0	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		2			6			4				8
Permitted Phases	2			6			4			8	8	
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	33.8
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	33.8
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	39.2%
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	29.3
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		4.5			4.5			4.5				4.5
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		48.0			48.0			29.3				29.3
Actuated g/C Ratio		0.56			0.56			0.34				0.34

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	10
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio		0.40			0.40			0.05				0.05
Control Delay (s/veh)		12.3			12.3			17.4				15.0
Queue Delay		0.0			0.0			0.0				0.0
Total Delay (s/veh)		12.3			12.3			17.4				15.0
LOS		B			B			B				B
Approach Delay (s/veh)		12.3			12.3			17.4				15.0
Approach LOS		B			B			B				B
Queue Length 50th (ft)		120			121			10				8
Queue Length 95th (ft)		184			185			30				26
Internal Link Dist (ft)		1117			1053			136				159
Turn Bay Length (ft)												
Base Capacity (vph)		1037			1040			622				575
Starvation Cap Reductn		0			0			0				0
Spillback Cap Reductn		0			0			0				0
Storage Cap Reductn		0			0			0				0
Reduced v/c Ratio		0.40			0.40			0.05				0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 48.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 32: Columbia Dr & Lead Ave



Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

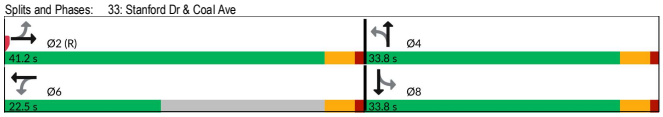
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	355	3	3	355	9	1	4	1	5	5	6
Future Volume (vph)	9	355	3	3	355	9	1	4	1	5	5	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.999			0.997			0.977			0.949	
Flt Protected		0.999						0.992			0.985	
Satd. Flow (prot)	0	1859	0	0	1856	0	0	1795	0	0	1722	0
Flt Permitted		0.991			0.998			0.986			0.963	
Satd. Flow (perm)	0	1844	0	0	1852	0	0	1779	0	0	1679	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			1			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	1		1	1		1	7		7	4		4
Confl. Bikes (#/hr)			2									1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	9	362	3	3	362	9	1	4	1	5	5	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	0	0	374	0	0	6	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		36.7			36.7			29.3			29.3	
Actuated g/C Ratio		0.49			0.49			0.39			0.39	
v/c Ratio		0.41			0.41			0.01			0.02	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay (s/veh)		14.0			12.0			13.2			11.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		14.0			12.0			13.2			11.6	
LOS		B			B			B			B	
Approach Delay (s/veh)		14.0			12.0			13.2			11.6	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		105			82			1			3	
Queue Length 95th (ft)		169			125			8			14	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		902			907			695			659	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.41			0.41			0.01			0.02	

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Stanford Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	302	95	94	302	13	38	213	38	22	142	23
Future Volume (vph)	14	302	95	94	302	13	38	213	38	22	142	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.99	1.00		0.99	1.00				0.98
Frt		0.969			0.994			0.977				0.850
Flt Protected		0.998		0.950			0.950				0.993	
Satd. Flow (prot)	0	1822	0	1805	1884	0	1805	1849	0	0	1887	1615
Flt Permitted		0.988		0.523			0.584				0.887	
Satd. Flow (perm)	0	1803	0	979	1884	0	1104	1849	0	0	1685	1582
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			4			14				87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	7		7	16		16	3		3			
Confl. Bikes (#/hr)			3			2						1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	308	97	96	308	13	39	217	39	22	145	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	419	0	96	321	0	39	256	0	0	167	23
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	0	0
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	0	0
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

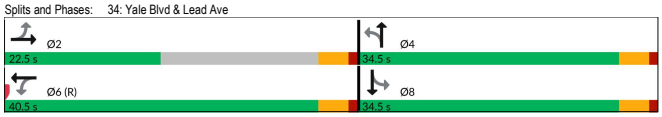
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		Free
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (%)	30.0%	30.0%		54.0%	54.0%		46.0%	46.0%		46.0%	46.0%	
Maximum Green (s)	18.0	18.0		36.0	36.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		50.6		50.6	50.6		15.4	15.4			15.4	75.0
Actuated g/C Ratio		0.67		0.67	0.67		0.21	0.21			0.21	1.00
v/c Ratio		0.34		0.15	0.25		0.17	0.65			0.48	0.01
Control Delay (s/veh)		6.5		6.3	6.2		24.1	33.2			29.9	0.0
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)		6.5		6.3	6.2		24.1	33.2			29.9	0.0
LOS		A		A	A		C	C			C	A
Approach Delay (s/veh)		6.5			6.2			32.0			26.3	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		63		14	49		15	104			69	0
Queue Length 95th (ft)		142		40	108		36	157			111	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)		1224		659	1271		441	748			674	1582
Starvation Cap Reductn		0		0	0		0	0			0	0
Spillback Cap Reductn		0		0	0		0	0			0	0
Storage Cap Reductn		0		0	0		0	0			0	0
Reduced v/c Ratio		0.34		0.15	0.25		0.09	0.34			0.25	0.01

Intersection Summary

Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			

Intersection Signal Delay (s/veh): 14.9	Intersection LOS: B
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Yale Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	224	25	26	223	21	77	274	78	17	296	18
Future Volume (vph)	21	224	25	26	223	21	77	274	78	17	296	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99		0.99	1.00	
Frt		0.985			0.990			0.975			0.992	
Flt Protected	0.950				0.995			0.991		0.950		
Satd. Flow (prot)	1805	1867	0	0	1866	0	0	1826	0	1805	1881	0
Flt Permitted	0.627				0.959			0.877		0.436		
Satd. Flow (perm)	1191	1867	0	0	1796	0	0	1614	0	823	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11			30			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)				14		14	8		8	10		10
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	21	229	26	27	228	21	79	280	80	17	302	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	255	0	0	276	0	0	439	0	17	320	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

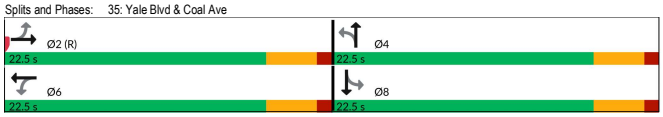
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	20.7	20.7			20.7			15.3		15.3	15.3	
Actuated g/C Ratio	0.46	0.46			0.46			0.34		0.34	0.34	
v/c Ratio	0.04	0.29			0.33			0.77		0.06	0.50	
Control Delay (s/veh)	8.5	9.3			9.9			22.2		9.2	13.6	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay (s/veh)	8.5	9.3			9.9			22.2		9.2	13.6	
LOS	A	A			A			C		A	B	
Approach Delay (s/veh)		9.3			9.9			22.2			13.4	
Approach LOS		A			A			C			B	
Queue Length 50th (ft)	3	37			42			86		3	58	
Queue Length 95th (ft)	12	81			89			#163		11	104	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130									90		
Base Capacity (vph)	547	865			831			663		329	757	
Starvation Cap Reductn	0	0			0			0		0	0	
Spillback Cap Reductn	0	0			0			0		0	0	
Storage Cap Reductn	0	0			0			0		0	0	
Reduced v/c Ratio	0.04	0.29			0.33			0.66		0.05	0.42	

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	

Intersection Signal Delay (s/veh): 14.7	Intersection LOS: B
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 35: Yale Blvd & Coal Ave



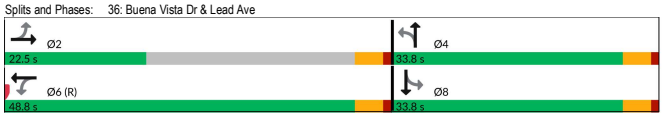
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	372	10	9	372	6	28	11	29	4	7	4
Future Volume (vph)	5	372	10	9	372	6	28	11	29	4	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.997			0.998			0.942			0.964	
Flt Protected		0.999			0.999			0.980			0.987	
Satd. Flow (prot)	0	1890	0	0	1893	0	0	1735	0	0	1795	0
Flt Permitted		0.996			0.991			0.910			0.963	
Satd. Flow (perm)	0	1885	0	0	1878	0	0	1608	0	0	1749	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			1			30			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	7		7	2		2	2		2
Confl. Bikes (#/hr)						1			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	380	10	9	380	6	29	11	30	4	7	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	395	0	0	395	0	0	70	0	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		48.8	48.8		33.8	33.8		33.8	33.8	
Total Split (%)	27.2%	27.2%		59.1%	59.1%		40.9%	40.9%		40.9%	40.9%	
Maximum Green (s)	18.0	18.0		44.3	44.3		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		44.3			44.3			29.3			29.3	
Actuated g/C Ratio		0.54			0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.39			0.39			0.12			0.02	
Control Delay (s/veh)		12.6			12.7			12.3			14.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		12.6			12.7			12.3			14.9	
LOS		B			B			B			B	
Approach Delay (s/veh)		12.6			12.7			12.3			14.9	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		112			112			13			4	
Queue Length 95th (ft)		174			174			41			16	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)		1011			1007			589			622	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.39			0.12			0.02	

Intersection Summary

Area Type: Other
Cycle Length: 82.6
Actuated Cycle Length: 82.6
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.39
Intersection Signal Delay (s/veh): 12.7 Intersection LOS: B
Intersection Capacity Utilization 46.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 36: Buena Vista Dr & Lead Ave



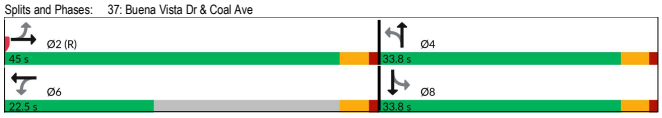
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	309	24	23	310	14	15	40	15	4	23	4
Future Volume (vph)	15	309	24	23	310	14	15	40	15	4	23	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.991			0.995			0.971			0.983	
Flt Protected		0.998			0.997			0.990			0.994	
Satd. Flow (prot)	0	1872	0	0	1883	0	0	1813	0	0	1845	0
Flt Permitted		0.983			0.970			0.918			0.964	
Satd. Flow (perm)	0	1843	0	0	1832	0	0	1676	0	0	1784	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			4			15			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	15		15	1		1	6		6	12		12
Confl. Bikes (#/hr)			1			1			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	315	24	23	316	14	15	41	15	4	23	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	354	0	0	353	0	0	71	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	45.0	45.0		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%		28.6%	28.6%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		64.7			64.7			8.5			8.5	
Actuated g/C Ratio		0.82			0.82			0.11			0.11	
v/c Ratio		0.23			0.23			0.37			0.16	
Control Delay (s/veh)		2.7			2.7			32.4			30.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		2.7			2.7			32.4			30.5	
LOS		A			A			C			C	
Approach Delay (s/veh)		2.7			2.7			32.4			30.5	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		33			33			26			12	
Queue Length 95th (ft)		64			64			63			36	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1513			1504			632			665	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.23			0.23			0.11			0.05	

Intersection Summary

Area Type: Other
Cycle Length: 78.8
Actuated Cycle Length: 78.8
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37
Intersection Signal Delay (s/veh): 6.4 Intersection LOS: A
Intersection Capacity Utilization 42.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	317	41	42	317	49	29	278	30	2	27	340
Future Volume (vph)	48	317	41	42	317	49	29	278	30	2	27	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		100	0		130	125		0		100	
Storage Lanes	0		0	0		1	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91
Ped Bike Factor		1.00			1.00	0.98	1.00	1.00			0.99	1.00
Frt		0.986				0.850		0.985				0.988
Flt Protected		0.994			0.994		0.950				0.950	
Satd. Flow (prot)	0	1859	0	0	1889	1615	1805	5096	0	0	1805	5113
Flt Permitted		0.922			0.923		0.457				0.553	
Satd. Flow (perm)	0	1725	0	0	1753	1586	865	5096	0	0	1039	5113
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		10				80		31				17
Link Speed (mph)		30			30			30				40
Link Distance (ft)		2138			998			770				1118
Travel Time (s)		48.6			22.7			17.5				19.1
Confl. Peds. (#/hr)	2		2	7		7	3		3	4	4	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	323	42	43	323	50	30	284	31	2	28	347
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	414	0	0	366	50	30	315	0	0	30	376
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2	1	1	2		1	1	2
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru			Left	Left	Thru
Leading Detector (ft)	20	100		20	100	20	20	100		20	20	100
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

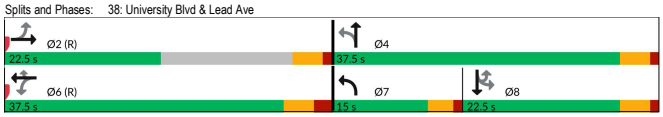
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		Perm	Perm	NA
Protected Phases		2			6		7	4				8
Permitted Phases	2			6		6	4			8	8	
Detector Phase	2	2		6	6	6	7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0	8.0	3.0	8.0		8.0	8.0	8.0
Minimum Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	37.5		22.5	22.5	22.5
Total Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	37.5		22.5	22.5	22.5
Total Split (%)	30.0%	30.0%		50.0%	50.0%	50.0%	20.0%	50.0%		30.0%	30.0%	30.0%
Maximum Green (s)	18.0	18.0		32.0	32.0	32.0	11.0	33.0		18.0	18.0	18.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.0	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		2.0	2.0	2.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)		4.5			5.5	5.5	4.0	4.5			4.5	4.5
Lead/Lag							Lead				Lag	Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	3.0			3.0	3.0	3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	Max			Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0		7.0			7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		23.0	23.0	23.0		10.0			10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0	0
Act Effct Green (s)		33.0			32.0	32.0	33.5	33.0				29.2	29.2
Actuated g/C Ratio		0.44			0.43	0.43	0.45	0.44				0.39	0.39
v/c Ratio		0.54			0.49	0.07	0.07	0.14				0.07	0.19
Control Delay (s/veh)		17.5			18.4	1.8	12.1	11.5				17.7	15.7
Queue Delay		0.0			0.0	0.0	0.0	0.0				0.0	0.0
Total Delay (s/veh)		17.5			18.4	1.8	12.1	11.5				17.7	15.7
LOS		B			B	A	B	B				B	B
Approach Delay (s/veh)		17.5			16.4			11.5					15.9
Approach LOS		B			B			B					B
Queue Length 50th (ft)		139			119	0	8	27				8	35
Queue Length 95th (ft)		226			193	10	22	43				29	67
Internal Link Dist (ft)		2058			918			690					1038
Turn Bay Length (ft)						130	125					100	
Base Capacity (vph)		764			747	722	524	2259				405	2002
Starvation Cap Reductn		0			0	0	0	0				0	0
Spillback Cap Reductn		0			0	0	0	0				0	0
Storage Cap Reductn		0			0	0	0	0				0	0
Reduced v/c Ratio		0.54			0.49	0.07	0.06	0.14				0.07	0.19

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 15.5	Intersection LOS: B
Intersection Capacity Utilization 83.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 38: University Blvd & Lead Ave



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	38	244	12	13	244	39	52	285	52	47	316	47
Future Volume (vph)	38	244	12	13	244	39	52	285	52	47	316	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Ped Bike Factor					1.00		0.89		0.94		1.00	
Frt		0.995				0.850			0.850		0.981	
Flt Protected		0.994			0.998		0.950			0.950		
Satd. Flow (prot)	0	1879	0	0	1896	1615	1805	3610	1615	1805	5075	0
Flt Permitted		0.823			0.980		0.523			0.469		
Satd. Flow (perm)	0	1556	0	0	1862	1615	884	3610	1526	891	5075	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				57			99		48	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)				7		7	70		70			
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	39	249	12	13	249	40	53	291	53	48	322	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	300	0	0	262	40	53	291	53	48	370	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		30	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		26	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

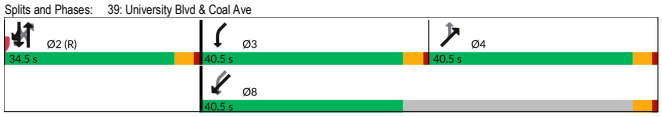
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA	Free	pm+pt	NA	
Protected Phases		2			2	2		4		3	8	
Permitted Phases	2			2			4		Free	8		
Detector Phase	2	2		2	2	2	4	4		3	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	34.5	34.5		34.5	34.5	34.5	40.5	40.5		40.5	40.5	
Total Split (s)	34.5	34.5		34.5	34.5	34.5	40.5	40.5		40.5	40.5	
Total Split (%)	29.9%	29.9%		29.9%	29.9%	29.9%	35.1%	35.1%		35.1%	35.1%	
Maximum Green (s)	30.0	30.0		30.0	30.0	30.0	36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	32.0	32.0		32.0	32.0	32.0	15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)		30.0			30.0	30.0	36.0	36.0	115.5	76.5	76.5	
Actuated g/C Ratio		0.26			0.26	0.26	0.31	0.31	1.00	0.66	0.66	
v/c Ratio		0.74			0.54	0.09	0.19	0.26	0.03	0.05	0.11	
Control Delay (s/veh)		51.4			41.8	5.1	31.5	30.5	0.0	7.0	6.2	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		51.4			41.8	5.1	31.5	30.5	0.0	7.0	6.2	
LOS		D			D	A	C	C	A	A	A	
Approach Delay (s/veh)		51.4			36.9			26.6			6.3	
Approach LOS		D			D			C			A	
Queue Length 50th (ft)		204			168	0	29	85	0	11	28	
Queue Length 95th (ft)		#317			255	17	63	122	0	25	41	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)						120			100	80		
Base Capacity (vph)		405			483	461	275	1125	1526	875	3377	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.74			0.54	0.09	0.19	0.26	0.03	0.05	0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	

Intersection Signal Delay (s/veh): 28.1	Intersection LOS: C
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave

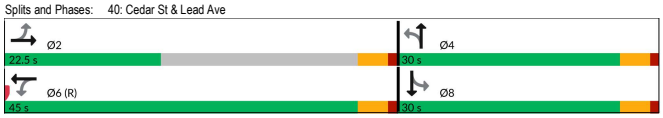


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	385	15	14	385	10	8	38	8	40	17	41
Future Volume (vph)	10	385	15	14	385	10	8	38	8	40	17	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.995			0.997			0.980			0.943	
Flt Protected		0.999			0.998			0.993			0.980	
Satd. Flow (prot)	0	1886	0	0	1889	0	0	1849	0	0	1756	0
Flt Permitted		0.991			0.985			0.957			0.878	
Satd. Flow (perm)	0	1871	0	0	1865	0	0	1782	0	0	1573	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			3			8			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		370			2138			144			153	
Travel Time (s)		8.4			48.6			3.3			3.5	
Confl. Peds. (#/hr)	6		6	1		1						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	393	15	14	393	10	8	39	8	41	17	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	418	0	0	417	0	0	55	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (%)	30.0%	30.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	18.0	18.0		40.5	40.5		25.5	25.5		25.5	25.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		60.5			60.5			8.9			8.9	
Actuated g/C Ratio		0.81			0.81			0.12			0.12	
v/c Ratio		0.28			0.28			0.25			0.45	
Control Delay (s/veh)		3.2			3.3			29.1			25.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		3.2			3.3			29.1			25.8	
LOS		A			A			C			C	
Approach Delay (s/veh)		3.2			3.3			29.1			25.8	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		41			34			20			26	
Queue Length 95th (ft)		86			95			50			67	
Internal Link Dist (ft)		290			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)		1509			1504			611			562	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.28			0.09			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Cedar St & Lead Ave

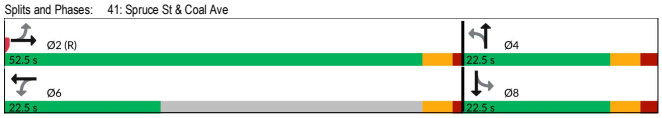


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	596	3	4	298	8	4	7	3	4	10	4
Future Volume (vph)	8	596	3	4	298	8	4	7	3	4	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98			0.99	
Frt		0.999			0.997			0.971			0.970	
Flt Protected		0.999			0.999			0.986			0.989	
Satd. Flow (prot)	0	1896	0	0	1891	0	0	1802	0	0	1814	0
Flt Permitted		0.996			0.995							
Satd. Flow (perm)	0	1890	0	0	1883	0	0	1817	0	0	1833	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			3			3			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	4		4	7		7	10		10	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	608	3	4	304	8	4	7	3	4	10	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	619	0	0	316	0	0	14	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	52.5	52.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%		30.0%	30.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0		18.0	18.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		71.4			71.4			8.0			8.0	
Actuated g/C Ratio		0.95			0.95			0.11			0.11	
v/c Ratio		0.34			0.18			0.07			0.09	
Control Delay (s/veh)		1.6			1.1			28.1			27.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		1.6			1.1			28.1			27.3	
LOS		A			A			C			C	
Approach Delay (s/veh)		1.6			1.1			28.1			27.3	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		0			0			5			6	
Queue Length 95th (ft)		119			51			21			24	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1799			1793			414			418	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.18			0.03			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



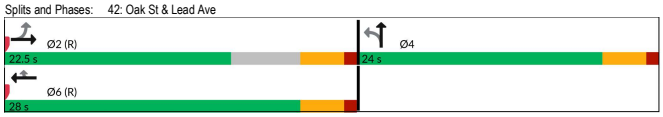
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	206	0	0	412	227	35	482	36	0	0	0
Future Volume (vph)	227	206	0	0	412	227	35	482	36	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						0.98						
Frt						0.850		0.990				
Flt Protected		0.974					0.950					
Satd. Flow (prot)	0	1851	0	0	3610	1615	1805	3574	0	0	0	0
Flt Permitted		0.624					0.950					
Satd. Flow (perm)	0	1186	0	0	3610	1587	1805	3574	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						196		17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			359			362			140	
Travel Time (s)		7.7			8.2			8.2			3.2	
Confl. Peds. (#/hr)				3		3						
Confl. Bikes (#/hr)						5						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	232	210	0	0	420	232	36	492	37	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	442	0	0	420	232	36	529	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2				
Detector Template	Left	Thru			Thru	Right	Left	Thru				
Leading Detector (ft)	20	100			100	20	20	100				
Trailing Detector (ft)	0	0			0	0	0	0				
Detector 1 Position(ft)	0	0			0	0	0	0				
Detector 1 Size(ft)	20	6			6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		2			6			4				
Permitted Phases	2					6	4					
Detector Phase	2	2			6	6	4	4				
Switch Phase												
Minimum Initial (s)	5.0	5.0			8.0	8.0	8.0	8.0				
Minimum Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (%)	43.3%	43.3%			53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)	18.0	18.0			23.5	23.5	19.5	19.5				
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5				
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0				
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0				
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			2.0	2.0	2.0	2.0				
Recall Mode	C-Max	C-Max			C-Max	C-Max	None	None				
Walk Time (s)	7.0	7.0			7.0	7.0	7.0	7.0				
Flash Don't Walk (s)	11.0	11.0			10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)		30.7			30.7	30.7	12.3	12.3				
Actuated g/C Ratio		0.59			0.59	0.59	0.24	0.24				
v/c Ratio		0.63			0.20	0.23	0.08	0.62				
Control Delay (s/veh)		14.5			5.9	2.4	14.2	19.9				
Queue Delay		0.0			0.0	0.0	0.0	0.0				
Total Delay (s/veh)		14.5			5.9	2.4	14.2	19.9				
LOS		B			A	A	B	B				
Approach Delay (s/veh)		14.5			4.7			19.5				
Approach LOS		B			A			B				
Queue Length 50th (ft)		73			25	4	9	74				
Queue Length 95th (ft)		#240			55	32	23	100				
Internal Link Dist (ft)		258			279			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)		700			2131	1017	676	1350				
Starvation Cap Reductn		0			0	0	0	0				
Spillback Cap Reductn		0			0	0	0	0				
Storage Cap Reductn		0			0	0	0	0				
Reduced v/c Ratio		0.63			0.20	0.23	0.05	0.39				

Intersection Summary
Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 12.3 Intersection LOS: B
Intersection Capacity Utilization 63.5% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



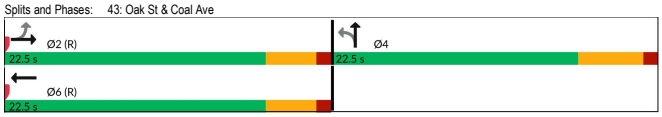
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	330	0	0	330	158	31	231	31	0	0	0
Future Volume (vph)	157	330	0	0	330	158	31	231	31	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor					1.00			1.00				
Frt					0.956			0.984				
Flt Protected	0.950							0.995				
Satd. Flow (prot)	1805	1900	0	0	1809	0	0	5066	0	0	0	0
Flt Permitted	0.420							0.995				
Satd. Flow (perm)	798	1900	0	0	1809	0	0	5066	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					64			32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Peds. (#/hr)				1		1	1		1	2		2
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	160	337	0	0	337	161	32	236	32	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	337	0	0	498	0	0	300	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		2			6			4				
Permitted Phases	2						4					
Detector Phase	2	2			6		4	4				
Switch Phase												
Minimum Initial (s)	10.0	10.0			5.0		10.0	10.0				
Minimum Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (%)	50.0%	50.0%			50.0%		50.0%	50.0%				
Maximum Green (s)	18.0	18.0			18.0		17.0	17.0				
Yellow Time (s)	3.5	3.5			3.5		4.5	4.5				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.5	4.5			4.5			5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			3.0		2.0	2.0				
Recall Mode	C-Max	C-Max			C-Max		None	None				
Walk Time (s)	7.0	7.0			7.0		7.0	7.0				
Flash Don't Walk (s)	10.0	10.0			11.0		10.0	10.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)	25.0	25.0			25.0			10.0				
Actuated g/C Ratio	0.56	0.56			0.56			0.22				
v/c Ratio	0.36	0.32			0.48			0.26				
Control Delay (s/veh)	8.5	6.5			7.1			13.6				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	8.5	6.5			7.1			13.6				
LOS	A	A			A			B				
Approach Delay (s/veh)		7.1			7.1			13.6				
Approach LOS		A			A			B				
Queue Length 50th (ft)	20	40			56			20				
Queue Length 95th (ft)	50	75			108			38				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	443	1055			1033			1933				
Starvation Cap Reductn	0	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.36	0.32			0.48			0.16				

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48

Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 43: Oak St & Coal Ave

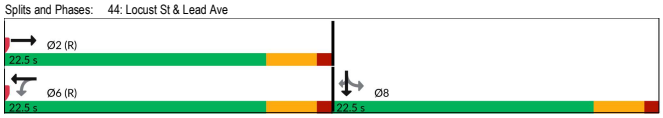


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	227	45	45	227	0	0	0	0	161	385	160
Future Volume (vph)	0	227	45	45	227	0	0	0	0	161	385	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor												
Frt		0.978										0.850
Flt Protected				0.950							0.985	
Satd. Flow (prot)	0	1858	0	1805	1900	0	0	0	0	0	3556	1615
Flt Permitted				0.589							0.985	
Satd. Flow (perm)	0	1858	0	1119	1900	0	0	0	0	0	3556	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26										163
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	232	46	46	232	0	0	0	0	164	393	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	0	46	232	0	0	0	0	0	557	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2					1	2	1
Detector Template		Thru		Left	Thru					Left	Thru	Right
Leading Detector (ft)		100		20	100					20	100	20
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		6		20	6					20	6	20
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA					Perm	NA	Perm
Protected Phases		2			6						8	
Permitted Phases				6						8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		6	6					8	8	8
Switch Phase												
Minimum Initial (s)		5.0		10.0	10.0					10.0	10.0	10.0
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	22.5
Total Split (s)		22.5		22.5	22.5					22.5	22.5	22.5
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	50.0%
Maximum Green (s)		18.0		18.0	18.0					18.0	18.0	18.0
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Recall Mode		C-Max		C-Max	C-Max					None	None	None
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	7.0
Flash Don't Walk (s)		11.0		11.0	11.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0		0	0					0	0	0
Act Effct Green (s)		22.1		22.1	22.1						13.9	13.9
Actuated g/C Ratio		0.49		0.49	0.49						0.31	0.31
v/c Ratio		0.30		0.08	0.25						0.51	0.27
Control Delay (s/veh)		6.8		8.1	8.6						13.9	3.4
Queue Delay		0.0		0.0	0.0						0.0	0.0
Total Delay (s/veh)		6.8		8.1	8.6						13.9	3.4
LOS		A		A	A						B	A
Approach Delay (s/veh)		6.8			8.6						11.5	
Approach LOS		A			A						B	
Queue Length 50th (ft)		34		6	31						60	0
Queue Length 95th (ft)		85		22	76						81	25
Internal Link Dist (ft)		1009			258		86				4	
Turn Bay Length (ft)												
Base Capacity (vph)		925		549	933						1422	743
Starvation Cap Reductn		0		0	0						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.30		0.08	0.25						0.39	0.22

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 9.8		Intersection LOS: A	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

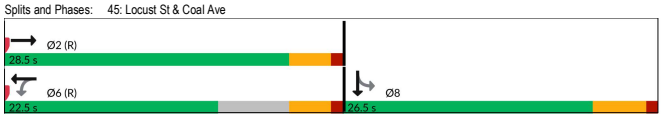


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	291	33	33	292	0	0	0	0	196	89	196
Future Volume (vph)	0	291	33	33	292	0	0	0	0	196	89	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00							
Frt		0.985									0.897	
Flt Protected					0.995					0.950		
Satd. Flow (prot)	0	3551	0	0	1890	0	0	0	0	1805	3238	0
Flt Permitted					0.948					0.950		
Satd. Flow (perm)	0	3551	0	0	1801	0	0	0	0	1805	3238	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28									200	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Peds. (#/hr)	2		2	1		1	4		4			
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	297	34	34	298	0	0	0	0	200	91	200
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	332	0	0	0	0	200	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2					1	2	
Detector Template		Thru		Left	Thru					Left	Thru	
Leading Detector (ft)		100		20	100					20	100	
Trailing Detector (ft)		0		0	0					0	0	
Detector 1 Position(ft)		0		0	0					0	0	
Detector 1 Size(ft)		6		20	6					20	6	
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6						8		
Detector Phase		2		6	6					8	8	
Switch Phase												
Minimum Initial (s)		10.0		5.0	5.0					10.0	10.0	
Minimum Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (%)		51.8%		40.9%	40.9%					48.2%	48.2%	
Maximum Green (s)		24.0		18.0	18.0					21.0	21.0	
Yellow Time (s)		3.5		3.5	3.5					4.5	4.5	
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)		0.0			0.0					0.0	0.0	
Total Lost Time (s)		4.5			4.5					5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0		3.0	3.0					2.0	2.0	
Recall Mode		C-Max		C-Max	C-Max					None	None	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)		13.0		11.0	11.0					10.0	10.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effct Green (s)		33.0			33.0					12.0	12.0	
Actuated g/C Ratio		0.60			0.60					0.22	0.22	
v/c Ratio		0.15			0.31					0.51	0.34	
Control Delay (s/veh)		5.2			7.0					23.1	7.1	
Queue Delay		0.0			0.0					0.0	0.0	
Total Delay (s/veh)		5.2			7.0					23.1	7.1	
LOS		A			A					C	A	
Approach Delay (s/veh)		5.2			7.0						13.6	
Approach LOS		A			A						B	
Queue Length 50th (ft)		17			41					60	13	
Queue Length 95th (ft)		42			103					98	34	
Internal Link Dist (ft)		280			272				72		117	
Turn Bay Length (ft)												
Base Capacity (vph)		2140			1080					689	1359	
Starvation Cap Reductn		0			0					0	0	
Spillback Cap Reductn		0			0					0	0	
Storage Cap Reductn		0			0					0	0	
Reduced v/c Ratio		0.15			0.31					0.29	0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave

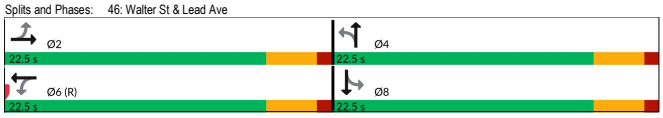


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	318	8	8	319	14	2	7	2	3	5	2
Future Volume (vph)	15	318	8	8	319	14	2	7	2	3	5	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.99	
Frt		0.997			0.995			0.975			0.973	
Flt Protected		0.998			0.999			0.991			0.985	
Satd. Flow (prot)	0	1890	0	0	1886	0	0	1836	0	0	1811	0
Flt Permitted		0.984			0.993							
Satd. Flow (perm)	0	1863	0	0	1875	0	0	1852	0	0	1835	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			2			2	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	2		2	6		6				5		5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	324	8	8	326	14	2	7	2	3	5	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	0	0	348	0	0	11	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		41.6			41.6			8.0			8.0	
Actuated g/C Ratio		0.92			0.92			0.18			0.18	
v/c Ratio		0.20			0.20			0.03			0.03	
Control Delay (s/veh)		1.7			1.2			12.1			14.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		1.7			1.2			12.1			14.5	
LOS		A			A			B			B	
Approach Delay (s/veh)		1.7			1.2			12.1			14.5	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			3			2	
Queue Length 95th (ft)		61			43			12			11	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)		1722			1734			742			735	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.20			0.20			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 22.5 (50%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 1.8		Intersection LOS: A	
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Walter St & Lead Ave

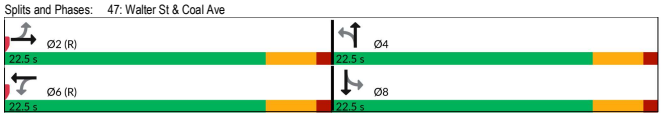


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	298	1	2	298	2	11	8	12	3	13	4
Future Volume (vph)	3	298	1	2	298	2	11	8	12	3	13	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt					0.999			0.948			0.973	
Flt Protected								0.983			0.993	
Satd. Flow (prot)	0	1900	0	0	1898	0	0	1756	0	0	1827	0
Flt Permitted		0.998			0.999							
Satd. Flow (perm)	0	1896	0	0	1896	0	0	1786	0	0	1839	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			12			4	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	1		1	4		4				2		2
Confl. Bikes (#/hr)									2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	304	1	2	304	2	11	8	12	3	13	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	0	0	308	0	0	31	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		41.6			41.6			8.0			8.0	
Actuated g/C Ratio		0.92			0.92			0.18			0.18	
v/c Ratio		0.18			0.18			0.09			0.06	
Control Delay (s/veh)		1.7			1.7			12.9			15.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		1.7			1.7			12.9			15.2	
LOS		A			A			B			B	
Approach Delay (s/veh)		1.7			1.7			12.9			15.2	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			4			0	
Queue Length 95th (ft)		53			53			20			14	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1753			1753			721			738	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.18			0.18			0.04			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.6		Intersection LOS: A	
Intersection Capacity Utilization 32.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	47	227	38	37	227	47	2	33	364	33	38	354
Future Volume (vph)	47	227	38	37	227	47	2	33	364	33	38	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00				0.99		0.99	1.00			1.00
Frt		0.983				0.850			0.987			
Flt Protected		0.993			0.993			0.950				0.995
Satd. Flow (prot)	0	1850	0	0	1887	1615	0	1755	3523	0	0	3560
Flt Permitted		0.915			0.918			0.451				0.875
Satd. Flow (perm)	0	1704	0	0	1744	1593	0	829	3523	0	0	3130
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		6				56			9			
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	6		6				2	2		2	2	
Confl. Bikes (#/hr)			1			2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%
Adj. Flow (vph)	48	232	39	38	232	48	2	34	371	34	39	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	319	0	0	270	48	0	36	405	0	0	400
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2	1	1	1	0		1	0
Detector Template	Left	Thru		Left	Thru	Right	Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100	20	20	35	0		20	0
Trailing Detector (ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Position(ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Size(ft)	20	6		20	6	20	20	33	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.97
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1572
Right Turn on Red	Yes
Satd. Flow (RTOR)	60
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	40
Shared Lane Traffic (%)	
Lane Group Flow (vph)	40
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

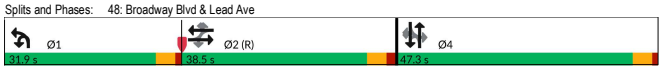
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	pm+pt	NA		Perm	NA
Protected Phases		2			2		1	1	4			4
Permitted Phases	2			2		2	4	4			4	
Detector Phase	2	2		2	2	2	1	1	4		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	3.0	3.0	8.0		8.0	8.0
Minimum Split (s)	38.5	38.5		38.5	38.5	38.5	24.2	24.2	47.3		47.3	47.3
Total Split (s)	38.5	38.5		38.5	38.5	38.5	31.9	31.9	47.3		47.3	47.3
Total Split (%)	32.7%	32.7%		32.7%	32.7%	32.7%	27.1%	27.1%	40.2%		40.2%	40.2%
Maximum Green (s)	33.5	33.5		33.5	33.5	33.5	27.4	27.4	42.8		42.8	42.8
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.0			5.0	5.0		4.5	4.5			4.5
Lead/Lag	Lag	Lag		Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	1.5	3.0		3.0	3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	Max		Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	0.0	0.0	7.0		7.0	7.0
Flash Don't Walk (s)	24.0	24.0		24.0	24.0	24.0	0.0	0.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0		0	0
Act Effct Green (s)		60.2			60.2	60.2		46.9	42.8			42.8
Actuated g/C Ratio		0.51			0.51	0.51		0.40	0.36			0.36
v/c Ratio		0.36			0.30	0.06		0.10	0.31			0.35
Control Delay (s/veh)		19.2			18.6	3.7		20.7	27.1			28.4
Queue Delay		0.0			0.0	0.0		0.0	0.0			0.0
Total Delay (s/veh)		19.2			18.6	3.7		20.7	27.1			28.4
LOS		B			B	A		C	C			C
Approach Delay (s/veh)		19.2			16.3				26.6			26.1
Approach LOS		B			B				C			C
Queue Length 50th (ft)		146			122	0		15	112			115
Queue Length 95th (ft)		218			184	17		36	154			158
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)						115		90				
Base Capacity (vph)		874			892	842		710	1286			1138
Starvation Cap Reductn		0			0	0		0	0			0
Spillback Cap Reductn		0			0	0		0	0			0
Storage Cap Reductn		0			0	0		0	0			0
Reduced v/c Ratio		0.36			0.30	0.06		0.05	0.31			0.35

Intersection Summary	
Area Type:	Other
Cycle Length: 117.7	
Actuated Cycle Length: 117.7	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.36	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	47.3
Total Split (s)	47.3
Total Split (%)	40.2%
Maximum Green (s)	42.8
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	42.8
Actuated g/C Ratio	0.36
v/c Ratio	0.07
Control Delay (s/veh)	3.2
Queue Delay	0.0
Total Delay (s/veh)	3.2
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	14
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	609
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.07
Intersection Summary	

Intersection Signal Delay (s/veh): 22.8	Intersection LOS: C
Intersection Capacity Utilization 90.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 48: Broadway Blvd & Lead Ave



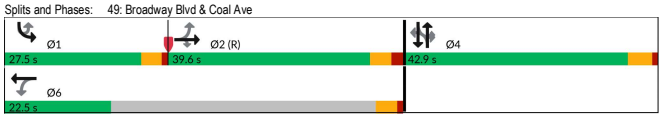
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	239	32	33	240	18	25	386	26	4	31	355
Future Volume (vph)	17	239	32	33	240	18	25	386	26	4	31	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	0		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor		1.00	0.98		1.00				0.98		1.00	1.00
Frt			0.850		0.992				0.850			0.987
Flt Protected		0.997			0.994			0.997			0.950	
Satd. Flow (prot)	0	1894	1615	0	1871	0	0	3566	1615	0	1805	3555
Flt Permitted		0.968			0.748			0.910			0.438	
Satd. Flow (perm)	0	1839	1589	0	1408	0	0	3255	1579	0	830	3555
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			64		5				69			9
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		10.8			25.1			9.6				8.2
Confl. Peds. (#/hr)	4		4	6		6					2	
Confl. Bikes (#/hr)			1						2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	17	244	33	34	245	18	26	394	27	4	32	362
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	261	33	0	297	0	0	420	27	0	36	395
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	custom	pm+pt	NA
Protected Phases		2			6!			4			1!	4
Permitted Phases	2		2	6!			4		4	1	4	
Minimum Split (s)	39.6	39.6	39.6	22.5	22.5		42.9	42.9	42.9	27.5	27.5	42.9
Total Split (s)	39.6	39.6	39.6	22.5	22.5		42.9	42.9	42.9	27.5	27.5	42.9
Total Split (%)	36.0%	36.0%	36.0%	20.5%	20.5%		39.0%	39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	34.1	34.1	34.1	18.0	18.0		37.9	37.9	37.9	23.0	23.0	37.9
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		4.0	4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		5.5	5.5		4.5			5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0	11.0	11.0		13.0	13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	32
Future Volume (vph)	32
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	33
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	0
Act Effct Green (s)		34.1	34.1		62.6			37.9	37.9		61.4	37.9
Actuated g/C Ratio		0.31	0.31		0.57			0.34	0.34		0.56	0.34
v/c Ratio		0.46	0.06		0.37			0.37	0.05		0.05	0.32
Control Delay (s/veh)		33.7	1.9		14.3			28.4	0.2		9.7	26.8
Queue Delay		0.0	0.0		0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		33.7	1.9		14.3			28.4	0.2		9.7	26.8
LOS		C	A		B			C	A		A	C
Approach Delay (s/veh)		30.1			14.3			26.7				25.4
Approach LOS		C			B			C				C
Queue Length 50th (ft)		148	0		106			116	0		10	104
Queue Length 95th (ft)		226	7		166			160	0		23	145
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)		570	536		803			1121	589		667	1230
Starvation Cap Reductn		0	0		0			0	0		0	0
Spillback Cap Reductn		0	0		0			0	0		0	0
Storage Cap Reductn		0	0		0			0	0		0	0
Reduced v/c Ratio		0.46	0.06		0.37			0.37	0.05		0.05	0.32

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 24.5		Intersection LOS: C	
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 49: Broadway Blvd & Coal Ave



Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	26	420	18	1	13	361
Future Volume (vph)	42	26	420	18	1	13	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							
Frt	0.948		0.995				
Flt Protected	0.970						0.998
Satd. Flow (prot)	1713	0	1853	0	0	0	1859
Flt Permitted	0.970						0.998
Satd. Flow (perm)	1713	0	1853	0	0	0	1859
Link Speed (mph)	30		30				30
Link Distance (ft)	2628		1321				545
Travel Time (s)	59.7		30.0				12.4
Confl. Peds. (#/hr)	5	5					
Confl. Bikes (#/hr)		2		4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	27	429	18	1	13	368
Shared Lane Traffic (%)							
Lane Group Flow (vph)	70	0	447	0	0	0	382
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		12				12
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane			Yes				Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	10	9	8	20	8	12	155	4	2	160	17
Future Volume (vph)	12	10	9	8	20	8	12	155	4	2	160	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.961			0.970			0.997			0.987	
Flt Protected		0.981			0.989			0.997			0.999	
Satd. Flow (prot)	0	1756	0	0	1787	0	0	1852	0	0	1837	0
Flt Permitted		0.981			0.989			0.997			0.999	
Satd. Flow (perm)	0	1756	0	0	1787	0	0	1852	0	0	1837	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	4		4	1		1	1		1	1		1
Confl. Bikes (#/hr)			3			7			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	10	9	8	20	8	12	158	4	2	163	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	36	0	0	174	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	9	6	1	0	3	9	246	1	4	242	10
Future Volume (vph)	4	9	6	1	0	3	9	246	1	4	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.957			0.899			0.999			0.994	
Flt Protected		0.990			0.988		0.950			0.950		
Satd. Flow (prot)	0	1800	0	0	1688	0	1805	1898	0	1805	1889	0
Flt Permitted		0.990			0.988		0.950			0.950		
Satd. Flow (perm)	0	1800	0	0	1688	0	1805	1898	0	1805	1889	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)	5		5	1		1	5		5	1		1
Confl. Bikes (#/hr)			3			2			4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	9	6	1	0	3	9	251	1	4	247	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	4	0	9	252	0	4	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.9%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	9	5	7	6	1
Future Volume (vph)	4	9	5	7	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.907				0.981	
Flt Protected	0.985			0.980		
Satd. Flow (prot)	1697	0	0	1862	1864	0
Flt Permitted	0.985			0.980		
Satd. Flow (perm)	1697	0	0	1862	1864	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	657	
Travel Time (s)	31.0			6.3	14.9	
Confl. Peds. (#/hr)	3	3				
Confl. Bikes (#/hr)		1				1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	9	5	7	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	0	0	12	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.8%	ICU Level of Service A	
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Future Volume (vph)	186	922	133	3	117	583	159	112	350	203	170	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	147		0		130		0	104		0	200	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99		0.98	1.00	1.00
Frt		0.981				0.968				0.850		0.947
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5079	0	0	1805	5002	0	1805	3610	1615	1805	3403
Flt Permitted	0.262				0.174			0.400			0.463	
Satd. Flow (perm)	497	5079	0	0	330	5002	0	756	3610	1590	879	3403
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		22				56				207		82
Link Speed (mph)		35				35			30			30
Link Distance (ft)		1127				1168			542			544
Travel Time (s)		22.0				22.8			12.3			12.4
Confl. Peds. (#/hr)	2		2	4	4		4	11		11	1	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	190	941	136	3	119	595	162	114	357	207	173	314
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	1077	0	0	122	757	0	114	357	207	173	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	0		1	1	0		1	0	0	0	0
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	40	0		20	17	0		25	0	0	0	0
Trailing Detector (ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	3	0		0	0	0	0	0
Detector 1 Size(ft)	40	6		20	14	6		25	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases	2			1	6			4		Free	8	
Detector Phase	5	2		1	1	6		7	4		3	8

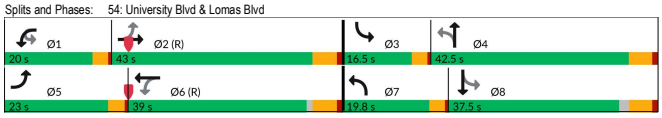
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	167
Future Volume (vph)	167
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	170
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0	20.0
Minimum Split (s)	18.7	37.4		17.6	17.6	36.3		19.8	38.5		16.5	35.2
Total Split (s)	23.0	43.0		20.0	20.0	39.0		19.8	42.5		16.5	37.5
Total Split (%)	18.9%	35.2%		16.4%	16.4%	32.0%		16.2%	34.8%		13.5%	30.7%
Maximum Green (s)	19.5	37.5		16.5	16.5	33.5		16.3	37.0		13.0	32.0
Yellow Time (s)	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0	4.5
All-Red Time (s)	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5	1.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	5.5			3.5	5.5		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	Max		None	Max
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Don't Walk (s)		30.0				19.0			30.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	58.7	45.3			53.2	42.6		50.4	39.4	122.0	53.6	41.0
Actuated g/C Ratio	0.48	0.37			0.44	0.35		0.41	0.32	1.00	0.44	0.34
v/c Ratio	0.53	0.57			0.49	0.42		0.29	0.31	0.13	0.37	0.40
Control Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.6	31.6			24.6	29.3		21.7	32.4	0.2	22.6	27.1
LOS	C	C			C	C		C	C	A	C	C
Approach Delay (s/veh)		30.4				28.6			20.8			25.9
Approach LOS		C				C			C			C
Queue Length 50th (ft)	83	239			51	152		51	111	0	80	126
Queue Length 95th (ft)	131	300			88	203		88	157	0	129	183
Internal Link Dist (ft)		1047				1088			462			464
Turn Bay Length (ft)	147				130			104			200	
Base Capacity (vph)	451	1901			359	1782		484	1164	1590	493	1197
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.42	0.57			0.34	0.42		0.24	0.31	0.13	0.35	0.40

Intersection Summary

Area Type: Other
Cycle Length: 122
Actuated Cycle Length: 122
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.57
Intersection Signal Delay (s/veh): 27.2 Intersection LOS: C
Intersection Capacity Utilization 93.6% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Future Volume (vph)	3	130	865	132	8	100	1011	106	177	92	87	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00		0.99		0.99		
Frt				0.850				0.850		0.927		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1788	5136	1615	0	1805	5136	1615	1805	1751	0	0
Flt Permitted		0.222				0.280			0.610			
Satd. Flow (perm)	0	418	5136	1615	0	531	5136	1594	1159	1751	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				135				117		48		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)					1	1		1				2
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	133	883	135	8	102	1032	108	181	94	89	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	883	135	0	110	1032	108	181	183	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	134	75	113
Future Volume (vph)	134	75	113
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.642		
Satd. Flow (perm)	1216	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			117
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)	2		2
Confl. Bikes (#/hr)			
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	137	77	115
Shared Lane Traffic (%)			
Lane Group Flow (vph)	166	77	115
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.4	15.4	44.0	44.0	13.2	13.2	41.8	41.8	13.2	52.8		33.0
Total Split (s)	21.6	21.6	51.6	51.6	14.4	14.4	44.4	44.4	13.2	54.0		42.0
Total Split (%)	17.8%	17.8%	42.6%	42.6%	11.9%	11.9%	36.6%	36.6%	10.9%	44.6%		34.7%
Maximum Green (s)	18.1	18.1	46.1	46.1	10.9	10.9	38.9	38.9	9.7	48.5		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		74.3	64.4	64.4		72.7	63.6	63.6	37.2	35.2		
Actuated g/C Ratio		0.61	0.53	0.53		0.60	0.52	0.52	0.31	0.29		
v/c Ratio		0.39	0.32	0.15		0.28	0.38	0.12	0.44	0.34		
Control Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		13.5	17.7	3.6		12.0	19.0	3.5	34.7	24.9		
LOS		B	B	A		B	B	A	C	C		
Approach Delay (s/veh)			15.6				17.0			29.7		
Approach LOS			B				B			C		
Queue Length 50th (ft)		39	136	0		31	168	0	109	82		
Queue Length 95th (ft)		82	208	37		68	253	30	153	129		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		470	2730	921		447	2696	892	407	746		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.29	0.32	0.15		0.25	0.38	0.12	0.44	0.25		

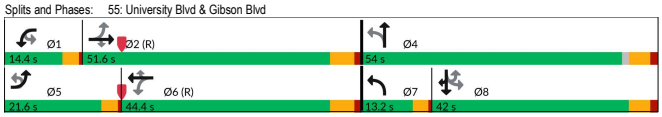
Intersection Summary
Area Type: Other
Cycle Length: 121.2
Actuated Cycle Length: 121.2
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	33.0	33.0	33.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	34.7%	34.7%	34.7%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	22.1	22.1	22.1
Actuated g/C Ratio	0.18	0.18	0.18
v/c Ratio	0.75	0.22	0.30
Control Delay (s/veh)	66.6	41.4	8.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	66.6	41.4	8.3
LOS	E	D	A
Approach Delay (s/veh)		42.4	
Approach LOS		D	
Queue Length 50th (ft)	124	52	0
Queue Length 95th (ft)	187	88	44
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	366	572	568
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.13	0.20

Intersection Summary

Intersection Signal Delay (s/veh): 20.9 Intersection LOS: C
Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	10	143	394	75	8	27	409	19	1	52	145	43
Future Volume (vph)	10	143	394	75	8	27	409	19	1	52	145	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0		80		0
Storage Lanes		1		1		1		0		1		0
Taper Length (ft)		25				25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.98		0.93			1.00			0.98	0.96	
Frt				0.850			0.993				0.948	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1794	1900	1615	0	1805	3580	0	0	1770	1731	0
Flt Permitted		0.144				0.381				0.529		
Satd. Flow (perm)	0	266	1900	1505	0	724	3580	0	0	964	1731	0
Right Turn on Red				Yes					Yes			
Satd. Flow (RTOR)				115							7	
Link Speed (mph)			35				30				30	
Link Distance (ft)			766				747				1373	
Travel Time (s)			14.9				17.0				31.2	
Confl. Peds. (#/hr)	13	13		13	2	2		2	2	20		20
Confl. Bikes (#/hr)				1								2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	10	146	402	77	8	28	417	19	1	53	148	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	402	77	0	36	437	0	0	53	227	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Right	Left	Left	Right
Median Width(ft)			12				12				12	
Link Offset(ft)			0				0				0	
Crosswalk Width(ft)			16				16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	9	15		9
Number of Detectors	1	1	2	1	1	1	2			1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru			Left	Thru	
Leading Detector (ft)	20	50	100	20	20	30	100			40	40	
Trailing Detector (ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Position(ft)	0	3	0	0	0	2	0			0	0	
Detector 1 Size(ft)	20	47	6	20	20	28	6			40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	34	2	66	157	65	126	24
Future Volume (vph)	34	2	66	157	65	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			190		190	0	
Storage Lanes			1		1	2	
Taper Length (ft)			25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95		0.97		0.95
Frt					0.850	0.850	0.850
Flt Protected			0.950				
Satd. Flow (prot)	0	0	1805	1900	1583	1615	1615
Flt Permitted			0.328				
Satd. Flow (perm)	0	0	595	1900	1542	1615	1528
Right Turn on Red	Yes				Yes		Yes
Satd. Flow (RTOR)					120		115
Link Speed (mph)				30			
Link Distance (ft)				2313			
Travel Time (s)				52.6			
Confl. Peds. (#/hr)	20	9	9		9	14	14
Confl. Bikes (#/hr)	2				1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%
Adj. Flow (vph)	35	2	67	160	66	129	24
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	69	160	66	129	24
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Right	Left	Left	Left	Right	Right	Right
Median Width(ft)				12			
Link Offset(ft)				0			
Crosswalk Width(ft)				16			
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15	15		9	9	9
Number of Detectors		1	1	1	1	1	1
Detector Template		Left	Left	Thru	Right	Right	Right
Leading Detector (ft)		20	38	42	45	20	20
Trailing Detector (ft)		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0	0	0
Detector 1 Size(ft)		20	38	42	45	20	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	WBR2	NBL	NBT	NBR
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA			pm+pt	NA	
Protected Phases		5	2			1	6			7	4	
Permitted Phases	5			2	1					4		
Detector Phase	5	5	2	2	1	1	6			7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0			4.0	12.0	
Minimum Split (s)	19.8	19.8	48.4	48.4	15.4	15.4	44.0			15.4	27.5	
Total Split (s)	22.5	22.5	48.4	48.4	22.5	22.5	44.0			15.4	31.9	
Total Split (%)	19.0%	19.0%	40.9%	40.9%	19.0%	19.0%	37.2%			13.0%	27.0%	
Maximum Green (s)	17.0	17.0	42.9	42.9	17.0	17.0	38.5			10.4	26.9	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			3.5	3.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5			1.5	1.5	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5			5.0	5.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag			Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	None	None	Max			None	None	
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0				0.0	
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0				0.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0				0	
Act Effct Green (s)		27.8	62.4	62.4		14.0	42.9			27.0	20.2	
Actuated g/C Ratio		0.24	0.53	0.53		0.12	0.36			0.23	0.17	
v/c Ratio		2.52	0.40	0.09		0.42	0.34			0.19	0.75	
Control Delay (s/veh)		752.5	23.7	1.7		61.7	28.2			30.3	60.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0			0.0	0.0	
Total Delay (s/veh)		752.5	23.7	1.7		61.7	28.2			30.3	60.5	
LOS		F	C	A		E	C			C	E	
Approach Delay (s/veh)			200.1				30.8				54.8	
Approach LOS			F				C				D	
Queue Length 50th (ft)		~203	212	0		25	126			30	161	
Queue Length 95th (ft)		#354	350	13		60	169			55	234	
Internal Link Dist (ft)			686				667				1293	
Turn Bay Length (ft)		250				155				80		
Base Capacity (vph)		62	1002	848		107	1299			303	399	
Starvation Cap Reductn		0	0	0		0	0			0	0	
Spillback Cap Reductn		0	0	0		0	0			0	0	
Storage Cap Reductn		0	0	0		0	0			0	0	
Reduced v/c Ratio		2.52	0.40	0.09		0.34	0.34			0.17	0.57	

Intersection Summary

Area Type: Other
Cycle Length: 118.2
Actuated Cycle Length: 118.2
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.52

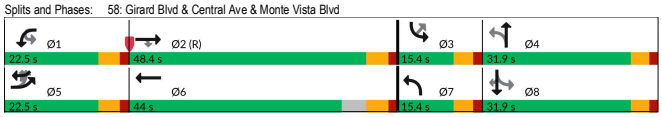
Lane Group	NBR2	SBL2	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)							
Turn Type		custom	pm+pt	NA	Perm	Over	Perm
Protected Phases			3	8		5	
Permitted Phases		3	8		8		5
Detector Phase		3	3	8	8	5	5
Switch Phase							
Minimum Initial (s)		4.0	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)		15.4	15.4	30.8	30.8	19.8	19.8
Total Split (s)		15.4	15.4	31.9	31.9	22.5	22.5
Total Split (%)		13.0%	13.0%	27.0%	27.0%	19.0%	19.0%
Maximum Green (s)		10.4	10.4	26.9	26.9	17.0	17.0
Yellow Time (s)		3.5	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)			0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)			5.0	5.0	5.0	5.5	5.5
Lead/Lag		Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0	3.0	3.0	3.0	1.0	1.0
Recall Mode		None	None	None	None	None	None
Walk Time (s)				4.0	4.0	4.0	4.0
Flash Don't Walk (s)				20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)				0	0	0	0
Act Effct Green (s)			28.0	20.7	20.7	27.8	27.8
Actuated g/C Ratio			0.24	0.18	0.18	0.24	0.24
v/c Ratio			0.30	0.48	0.18	0.34	0.05
Control Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
Queue Delay			0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)			32.9	47.8	1.4	44.6	0.2
LOS			C	D	A	D	A
Approach Delay (s/veh)				33.9			
Approach LOS				C			
Queue Length 50th (ft)			39	111	0	85	0
Queue Length 95th (ft)			68	169	4	159	0
Internal Link Dist (ft)				2233			
Turn Bay Length (ft)			190		190		
Base Capacity (vph)			252	433	444	379	447
Starvation Cap Reductn			0	0	0	0	0
Spillback Cap Reductn			0	0	0	0	0
Storage Cap Reductn			0	0	0	0	0
Reduced v/c Ratio			0.27	0.37	0.15	0.34	0.05

Intersection Summary

Intersection Signal Delay (s/veh): 94.1	Intersection LOS: F
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	409	410	0	0	0
Future Volume (vph)	0	409	410	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		359	370		92	
Travel Time (s)		8.2	8.4		2.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	417	418	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	417	418	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	324	0	0	325	0	0	0	0	0	0	0
Future Volume (vph)	0	324	0	0	325	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	331	0	0	332	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	332	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Future Volume (vph)	2	28	894	39	3	20	1545	17	420	33	176	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		133		0		133		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00					
Frt			0.994				0.998				0.850	
Flt Protected		0.950				0.950				0.956		
Satd. Flow (prot)	0	1805	5153	0	0	1805	5175	0	0	1816	1615	0
Flt Permitted		0.112				0.236				0.713		
Satd. Flow (perm)	0	213	5153	0	0	448	5175	0	0	1355	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2				155	
Link Speed (mph)			45				45			25		
Link Distance (ft)			3760				297			341		
Travel Time (s)			57.0				4.5			9.3		
Confl. Peds. (#/hr)												1
Confl. Bikes (#/hr)				1				2			10	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	29	931	41	3	21	1609	18	438	34	183	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	972	0	0	24	1627	0	0	472	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	31	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	31	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	3	31
Future Volume (vph)	3	31
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.889	
Flt Protected	0.995	
Satd. Flow (prot)	1661	0
Flt Permitted	0.960	
Satd. Flow (perm)	1603	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	28	
Link Speed (mph)	25	
Link Distance (ft)	288	
Travel Time (s)	7.9	
Confl. Peds. (#/hr)		1
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	3	32
Shared Lane Traffic (%)		
Lane Group Flow (vph)	39	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Prot	Perm
Protected Phases			2			1	6			4	4	
Permitted Phases	2	2			1	6			4			8
Detector Phase	2	2	2		1	1	6		4	4	4	8
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	63.7	63.7	63.7		13.0	13.0	76.7		53.3	53.3	53.3	53.0
Total Split (s)	63.7	63.7	63.7		30.0	30.0	84.0		53.3	53.3	53.3	53.0
Total Split (%)	43.3%	43.3%	43.3%		20.4%	20.4%	57.1%		36.3%	36.3%	36.3%	36.1%
Maximum Green (s)	58.0	58.0	58.0		26.5	26.5	78.3		47.8	47.8	47.8	47.5
Yellow Time (s)	4.2	4.2	4.2		3.0	3.0	4.2		3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.7	5.7			3.5	5.7			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		1.5	1.5	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)	7.0	7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	13.0	13.0	13.0				17.0		25.0	25.0	25.0	25.0
Pedestrian Calls (#/hr)	0	0	0				0		0	0	0	0
Act Effct Green (s)		82.8	82.8			90.2	88.0			47.8	47.8	
Actuated g/C Ratio		0.56	0.56			0.61	0.60			0.33	0.33	
v/c Ratio		0.26	0.33			0.08	0.53			1.07	0.29	
Control Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		25.2	18.0			11.7	18.0			110.2	9.1	
LOS		C	B			B	B			F	A	
Approach Delay (s/veh)			18.2				17.9			82.0		
Approach LOS			B				B			F		
Queue Length 50th (ft)		15	185			9	319			~500	18	
Queue Length 95th (ft)		43	220			21	359			#723	77	
Internal Link Dist (ft)			3680				217			261		
Turn Bay Length (ft)		133				133						
Base Capacity (vph)		120	2904			519	3098			440	629	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.26	0.33			0.05	0.53			1.07	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 147	
Actuated Cycle Length: 147	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	

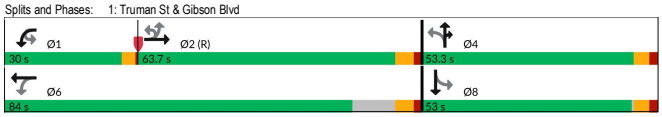
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	53.0	
Total Split (s)	53.0	
Total Split (%)	36.1%	
Maximum Green (s)	47.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	47.8	
Actuated g/C Ratio	0.33	
v/c Ratio	0.07	
Control Delay (s/veh)	15.8	
Queue Delay	0.0	
Total Delay (s/veh)	15.8	
LOS	B	
Approach Delay (s/veh)	15.8	
Approach LOS	B	
Queue Length 50th (ft)	7	
Queue Length 95th (ft)	36	
Internal Link Dist (ft)	208	
Turn Bay Length (ft)		
Base Capacity (vph)	540	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.07	

Intersection Summary

Intersection Signal Delay (s/veh): 30.5	Intersection LOS: C
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Truman St & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Future Volume (vph)	4	120	919	0	4	0	1907	94	242	62	46	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		250		339		215	300		0	150
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor								0.98				1.00
Frt								0.850		0.936		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1788	5187	1900	0	1805	5187	1615	1805	3379	0	1805
Flt Permitted		0.060				0.287			0.540			0.681
Satd. Flow (perm)	0	113	5187	1900	0	545	5187	1581	1026	3379	0	1289
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)								77		48		
Link Speed (mph)			45				45			30		
Link Distance (ft)			2659				921			371		
Travel Time (s)			40.3				14.0			8.4		
Confl. Peds. (#/hr)												4
Confl. Bikes (#/hr)								1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	125	957	0	4	0	1986	98	252	65	48	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	957	0	0	4	1986	98	252	113	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	40	40		30
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		5
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	40	40		25
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	98
Future Volume (vph)	0	98
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		150
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	1900	1583
Flt Permitted		
Satd. Flow (perm)	1900	1555
Right Turn on Red		Yes
Satd. Flow (RTOR)		238
Link Speed (mph)	30	
Link Distance (ft)	2595	
Travel Time (s)	59.0	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		2
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	0	102
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	102
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	1
Detector Template	Thru	Right
Leading Detector (ft)	30	30
Trailing Detector (ft)	5	5
Detector 1 Position(ft)	5	5
Detector 1 Size(ft)	25	25
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	8.0		3.0
Minimum Split (s)	13.0	13.0	54.6	54.6	13.0	13.0	54.6	54.6	20.8	41.6		20.8
Total Split (s)	15.6	15.6	54.6	54.6	16.8	16.8	54.6	54.6	20.8	41.6		20.8
Total Split (%)	11.7%	11.7%	40.8%	40.8%	12.6%	12.6%	40.8%	40.8%	15.5%	31.1%		15.5%
Maximum Green (s)	12.1	12.1	49.6	49.6	13.3	13.3	49.6	49.6	17.3	36.1		17.3
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	2.0		0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		3.5	5.0	5.0		3.5	5.0	5.0	3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			20.0	20.0			16.0	16.0		27.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		96.5	93.4			89.5	84.0	84.0	30.3	18.5		18.0
Actuated g/C Ratio		0.72	0.70			0.67	0.63	0.63	0.23	0.14		0.13
v/c Ratio		0.74	0.26			0.01	0.61	0.10	0.77	0.22		0.33
Control Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		43.0	7.9			5.8	16.4	3.6	62.8	32.5		46.7
LOS		D	A			A	B	A	E	C		D
Approach Delay (s/veh)			12.1				15.8			53.4		
Approach LOS			B				B			D		
Queue Length 50th (ft)		41	99			1	357	6	197	26		48
Queue Length 95th (ft)		110	145			4	445	31	#303	58		90
Internal Link Dist (ft)			2579				841			291		
Turn Bay Length (ft)		250				339		215	300			150
Base Capacity (vph)		232	3622			516	3254	1020	332	946		329
Starvation Cap Reductn		0	0			0	0	0	0	0		0
Spillback Cap Reductn		0	0			0	0	0	0	0		0
Storage Cap Reductn		0	0			0	0	0	0	0		0
Reduced v/c Ratio		0.56	0.26			0.01	0.61	0.10	0.76	0.12		0.21

Intersection Summary

Area Type: Other
Cycle Length: 133.8
Actuated Cycle Length: 133.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77

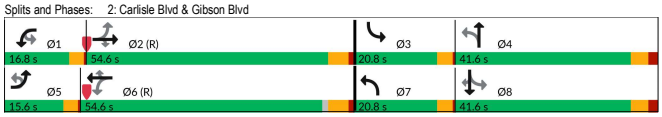
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	8.0	8.0
Minimum Split (s)	41.6	41.6
Total Split (s)	41.6	41.6
Total Split (%)	31.1%	31.1%
Maximum Green (s)	36.1	36.1
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.0	2.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	5.5	5.5
Lead/Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Don't Walk (s)	31.0	31.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		8.0
Actuated g/C Ratio		0.06
v/c Ratio		0.32
Control Delay (s/veh)		2.7
Queue Delay		0.0
Total Delay (s/veh)		2.7
LOS		A
Approach Delay (s/veh)	20.3	
Approach LOS	C	
Queue Length 50th (ft)		0
Queue Length 95th (ft)		0
Internal Link Dist (ft)	2515	
Turn Bay Length (ft)		150
Base Capacity (vph)		593
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.17

Intersection Summary

Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Carlisle Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	4	29	992	1941	66	27	43
Future Volume (vph)	4	29	992	1941	66	27	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232			0	0	0
Storage Lanes		1			0	1	1
Taper Length (ft)		25				25	
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	1.00
Ped Bike Factor						1.00	
Frt				0.995			0.850
Flt Protected		0.950				0.950	
Satd. Flow (prot)	0	1805	5187	5161	0	1805	1615
Flt Permitted		0.073				0.950	
Satd. Flow (perm)	0	139	5187	5161	0	1798	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				6			45
Link Speed (mph)			45	45		15	
Link Distance (ft)			921	3760		162	
Travel Time (s)			14.0	57.0		7.4	
Confl. Peds. (#/hr)						3	3
Confl. Bikes (#/hr)							1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	30	1033	2022	69	28	45
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	34	1033	2091	0	28	45
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Left	Right	Left	Right
Median Width(ft)			12	12		12	
Link Offset(ft)			0	0		0	
Crosswalk Width(ft)			16	16		16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15			9	15	9
Number of Detectors	1	1	2	2		1	1
Detector Template	Left	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	37	100	100		38	38
Trailing Detector (ft)	0	0	0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0
Detector 1 Size(ft)	20	37	6	6		38	38
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94	94			
Detector 2 Size(ft)			6	6			
Detector 2 Type			Cl+Ex	Cl+Ex			
Detector 2 Channel							

Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Detector 2 Extend (s)			0.0	0.0			
Turn Type	custom	pm+pt	NA	NA		Prot	Prot
Protected Phases		5	2	6		8	8
Permitted Phases	5	2					
Detector Phase	5	5	2	6		8	8
Switch Phase							
Minimum Initial (s)	3.0	3.0	20.0	20.0		8.0	8.0
Minimum Split (s)	13.0	13.0	93.6	80.6		36.4	36.4
Total Split (s)	13.2	13.2	93.6	80.6		38.4	38.4
Total Split (%)	10.0%	10.0%	70.8%	61.0%		29.0%	29.0%
Maximum Green (s)	9.7	9.7	88.6	75.6		32.9	32.9
Yellow Time (s)	3.0	3.0	4.0	4.0		3.5	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0		5.5	5.5
Lead/Lag	Lead	Lead		Lag			
Lead-Lag Optimize?	Yes	Yes		Yes			
Vehicle Extension (s)	1.5	1.5	4.0	4.0		4.0	4.0
Recall Mode	None	None	C-Max	C-Max		None	None
Walk Time (s)			7.0	7.0			
Flash Don't Walk (s)			13.0	13.0			
Pedestrian Calls (#/hr)			0	0			
Act Effct Green (s)		116.9	116.4	111.6		9.0	9.0
Actuated g/C Ratio		0.88	0.88	0.84		0.07	0.07
v/c Ratio		0.19	0.23	0.48		0.23	0.30
Control Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
Queue Delay		0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.8	1.7	4.2		62.5	21.0
LOS		A	A	A		E	C
Approach Delay (s/veh)			1.8	4.2		36.9	
Approach LOS			A	A		D	
Queue Length 50th (ft)		3	42	184		23	0
Queue Length 95th (ft)		8	60	238		55	40
Internal Link Dist (ft)			841	3680		82	
Turn Bay Length (ft)		232					
Base Capacity (vph)		245	4568	4358		449	435
Starvation Cap Reductn		0	0	0		0	0
Spillback Cap Reductn		0	0	0		0	0
Storage Cap Reductn		0	0	0		0	0
Reduced v/c Ratio		0.14	0.23	0.48		0.06	0.10

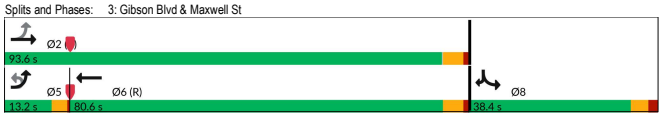
Intersection Summary

Area Type:	Other

Cycle Length: 132.2
Actuated Cycle Length: 132.2
Offset: 22.5 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48

Intersection Signal Delay (s/veh): 4.1	Intersection LOS: A
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Gibson Blvd & Maxwell St



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Future Volume (vph)	3	81	977	9	224	1886	67	23	43	89	34	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		218		218	333		172	406		406	110	
Storage Lanes		1		1	1		1	1		1	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor										0.99	1.00	
Frt				0.850			0.850			0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5187	1615	1805	5187	1615	1805	3610	1615	1805	1900
Flt Permitted		0.079			0.241			0.740			0.703	
Satd. Flow (perm)	0	150	5187	1615	458	5187	1615	1406	3610	1594	1333	1900
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				107			78			107		
Link Speed (mph)			45			45			30			30
Link Distance (ft)			2614			2659			720			954
Travel Time (s)			39.6			40.3			16.4			21.7
Confl. Peds. (#/hr)											2	
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	84	1018	9	233	1965	70	24	45	93	35	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	1018	9	233	1965	70	24	45	93	35	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2	1	1	1	1	1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	35	100	20	42	100	20	35	25	25	20	20
Trailing Detector (ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Position(ft)	0	3	0	0	5	0	0	2	2	2	12	12
Detector 1 Size(ft)	20	32	6	20	37	6	20	33	23	23	8	8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Storage Length (ft)	450
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.99
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1592
Right Turn on Red	Yes
Satd. Flow (RTOR)	107
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	70
Shared Lane Traffic (%)	
Lane Group Flow (vph)	70
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	12
Detector 1 Position(ft)	12
Detector 1 Size(ft)	8
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4		4	8	
Detector Phase	5	5	2	2	1	6	6	7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	12.0	12.0	3.0	12.0
Minimum Split (s)	11.7	11.7	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (s)	14.4	14.4	57.2	57.2	19.5	65.0	65.0	15.6	37.7	37.7	15.6	37.7
Total Split (%)	10.9%	10.9%	43.1%	43.1%	14.7%	49.0%	49.0%	11.8%	28.4%	28.4%	11.8%	28.4%
Maximum Green (s)	10.9	10.9	51.7	51.7	16.0	59.5	59.5	12.1	32.2	32.2	12.1	32.2
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	4.5	4.5	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0	1.5	4.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0	7.0		7.0
Flash Don't Walk (s)			20.0	20.0		17.0	17.0		31.0	31.0		33.0
Pedestrian Calls (#/hr)			0	0		0	0		0	0		0
Act Effct Green (s)		97.7	90.0	90.0	104.6	94.2	94.2	17.8	12.0	12.0	18.6	12.4
Actuated g/C Ratio		0.74	0.68	0.68	0.79	0.71	0.71	0.13	0.09	0.09	0.14	0.09
v/c Ratio		0.48	0.29	0.01	0.50	0.53	0.06	0.12	0.14	0.39	0.17	0.15
Control Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		16.3	9.8	0.0	7.7	10.4	1.6	46.9	56.8	12.1	48.0	57.5
LOS		B	A	A	A	B	A	D	E	B	D	E
Approach Delay (s/veh)			10.2			9.8			29.7			27.6
Approach LOS			B			A			C			C
Queue Length 50th (ft)		15	125	0	45	284	0	17	18	0	26	22
Queue Length 95th (ft)		44	185	0	75	368	15	43	39	42	56	53
Internal Link Dist (ft)			2534			2579			640			874
Turn Bay Length (ft)		218		218	333		172	406		406	110	
Base Capacity (vph)		251	3516	1129	526	3680	1168	251	875	467	246	461
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.35	0.29	0.01	0.44	0.53	0.06	0.10	0.05	0.20	0.14	0.06

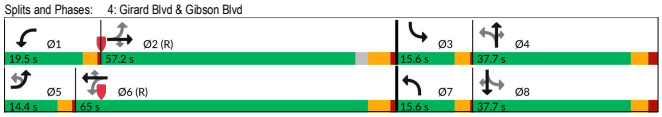
Intersection Summary	
Area Type:	Other
Cycle Length: 132.7	
Actuated Cycle Length: 132.7	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Detector Phase	8
Switch Phase	
Minimum Initial (s)	12.0
Minimum Split (s)	37.7
Total Split (s)	37.7
Total Split (%)	28.4%
Maximum Green (s)	32.2
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.5
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	7.0
Flash Don't Walk (s)	33.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.09
v/c Ratio	0.29
Control Delay (s/veh)	5.9
Queue Delay	0.0
Total Delay (s/veh)	5.9
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	17
Internal Link Dist (ft)	
Turn Bay Length (ft)	450
Base Capacity (vph)	467
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Girard Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Future Volume (vph)	5	107	658	153	1	249	1648	130	299	223	312	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		438		290		400		220	190		0	200
Storage Lanes		1		1		1		1	2		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	0.91	1.00	1.00
Ped Bike Factor				0.99				0.98	1.00		0.98	
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5187	1599	0	1805	5187	1615	3502	5187	1615	1805
Flt Permitted		0.096				0.347			0.268			0.601
Satd. Flow (perm)	0	182	5187	1599	0	656	5187	1582	985	5187	1589	1142
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				159				94			325	
Link Speed (mph)			45				45			40		
Link Distance (ft)			2630				2614			853		
Travel Time (s)			39.8				39.6			14.5		
Confl. Peds. (#/hr)					7	7		7	4		4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	111	685	159	1	259	1717	135	311	232	325	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	685	159	0	260	1717	135	311	232	325	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			24		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	161	170
Future Volume (vph)	161	170
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor		
Frt	0.923	
Flt Protected		
Satd. Flow (prot)	3332	0
Flt Permitted		
Satd. Flow (perm)	3332	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	177	
Link Speed (mph)	40	
Link Distance (ft)	766	
Travel Time (s)	13.1	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	168	177
Shared Lane Traffic (%)		
Lane Group Flow (vph)	345	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane	Yes	
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2		2	1	6		6	4		4	8
Detector Phase	5	5	2	2	1	1	6	6	7	4	4	3
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0
Minimum Split (s)	13.0	13.0	45.5	45.5	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (s)	18.0	18.0	49.2	49.2	28.6	28.6	61.1	61.1	14.3	42.9	42.9	13.0
Total Split (%)	13.3%	13.3%	36.3%	36.3%	21.1%	21.1%	45.1%	45.1%	10.6%	31.7%	31.7%	9.6%
Maximum Green (s)	14.5	14.5	43.2	43.2	25.1	25.1	55.1	55.1	10.8	36.9	36.9	9.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0	4.0	3.0
All-Red Time (s)	0.5	0.5	1.5	1.5	0.5	0.5	1.5	1.5	0.5	2.0	2.0	0.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		3.5	6.0	6.0		3.5	6.0	6.0	3.5	6.0	6.0	3.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	4.0	4.0	1.5
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None	None	None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0	7.0	
Flash Don't Walk (s)			24.0	24.0			25.0	25.0		30.0	30.0	
Pedestrian Calls (#/hr)			0	0			0	0		0	0	
Act Effct Green (s)		87.4	77.8	77.8		94.5	81.6	81.6	32.7	21.7	21.7	27.0
Actuated g/C Ratio		0.65	0.57	0.57		0.70	0.60	0.60	0.24	0.16	0.16	0.20
v/c Ratio		0.57	0.23	0.16		0.47	0.55	0.14	0.71	0.28	0.62	0.26
Control Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		21.3	14.8	2.6		10.3	17.2	4.8	51.8	51.8	10.8	42.1
LOS		C	B	A		B	B	A	D	D	B	D
Approach Delay (s/veh)			13.6				15.6			36.5		
Approach LOS			B				B			D		
Queue Length 50th (ft)		29	101	0		71	303	14	118	68	0	47
Queue Length 95th (ft)		69	146	35		118	405	48	155	94	89	85
Internal Link Dist (ft)			2550				2534			773		
Turn Bay Length (ft)		438		290		400		220	190			200
Base Capacity (vph)		299	2978	986		672	3124	990	438	1428	673	289
Starvation Cap Reductn		0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.23	0.16		0.39	0.55	0.14	0.71	0.16	0.48	0.24

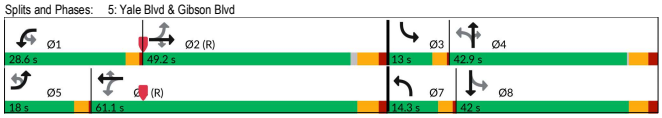
Intersection Summary			
Area Type:	Other		
Cycle Length: 135.4			
Actuated Cycle Length: 135.4			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 21.0		Intersection LOS: C	

Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	16.0	
Minimum Split (s)	41.6	
Total Split (s)	42.0	
Total Split (%)	31.0%	
Maximum Green (s)	36.0	
Yellow Time (s)	4.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	4.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	29.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	16.9	
Actuated g/C Ratio	0.12	
v/c Ratio	0.61	
Control Delay (s/veh)	31.5	
Queue Delay	0.0	
Total Delay (s/veh)	31.5	
LOS	C	
Approach Delay (s/veh)	33.2	
Approach LOS	C	
Queue Length 50th (ft)	73	
Queue Length 95th (ft)	122	
Internal Link Dist (ft)	686	
Turn Bay Length (ft)		
Base Capacity (vph)	1015	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.34	

Intersection Summary

Intersection Capacity Utilization 76.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 5: Yale Blvd & Gibson Blvd



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.223			0.214			0.237			0.271	
Satd. Flow (perm)	0	424	5128	0	407	3577	0	449	1793	0	514	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			17			9			21			7
Link Speed (mph)			35			35			30			30
Link Distance (ft)			2690			423			3147			303
Travel Time (s)			52.4			8.2			71.5			6.9
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (s)	78.0	78.0	78.0		78.0	78.0		42.0	42.0		42.0	42.0
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	73.0	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effct Green (s)		86.7	86.7		86.7	86.7		23.3	23.3		23.3	23.3
Actuated g/C Ratio		0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19
v/c Ratio		0.25	0.32		0.30	0.43		0.68	0.76		0.58	0.80
Control Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.5	6.7		10.6	7.9		79.9	55.1		64.7	61.0
LOS		A	A		B	A		E	E		E	E
Approach Delay (s/veh)			6.8			8.1			59.5			61.6
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	103		21	160		43	190		40	214
Queue Length 95th (ft)		51	161		63	255		89	263		83	288
Internal Link Dist (ft)			2610			343			3067			223
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		306	3709		294	2586		138	567		158	576
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.30	0.43		0.43	0.49		0.36	0.51

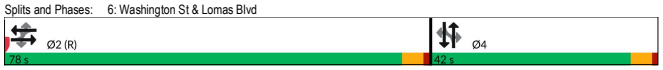
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Washington St & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		1.00		0.99	1.00		0.99	
Frt		0.993				0.987			0.984			
Flt Protected	0.950			0.950		0.995		0.950			0.950	
Satd. Flow (prot)	1805	5145	0	1805	0	5081	0	1805	1866	0	1805	1900
Flt Permitted	0.127			0.227		0.695		0.950			0.950	
Satd. Flow (perm)	241	5145	0	431	0	3548	0	1787	1866	0	1796	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		2652				2690			2352			634
Travel Time (s)		51.7				52.4			64.1			17.3
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	21	0	1092	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	Perm	NA		Split	NA		Split	NA
Protected Phases	5	2		1		6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	6	6		8	8		4	4

Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		153		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	Prot	Prot	Prot	Prot
Protected Phases	4	4	3	3
Permitted Phases				
Detector Phase	4	4	3	3

Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	30.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.3%	25.4%		15.3%	25.4%	25.4%		20.3%	20.3%		20.3%	20.3%
Maximum Green (s)	14.5	24.0		14.5	24.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5		5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	3.0	1.5		1.5	3.0	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	Max	Max		None	None		None	None
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0			21.0	21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	45.5	39.4		35.3		28.5		20.8	20.8		17.6	17.6
Actuated g/C Ratio	0.39	0.33		0.30		0.24		0.18	0.18		0.15	0.15
v/c Ratio	0.58	0.58		0.11		1.26		0.14	0.92		0.45	0.87
Control Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
Queue Delay	0.0	0.0		0.0		0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	34.7	35.1		25.3		164.1		44.0	81.4		51.3	78.0
LOS	C	D		C		F		D	F		D	E
Approach Delay (s/veh)		35.0				161.5			76.8			54.5
Approach LOS		D				F			E			D
Queue Length 50th (ft)	73	219		10		~393		29	~248		84	181
Queue Length 95th (ft)	122	300		28		#512		64	#430		146	#319
Internal Link Dist (ft)		2572				2610			2272			554
Turn Bay Length (ft)	95			100				112			130	
Base Capacity (vph)	285	1718		330		866		318	332		286	301
Starvation Cap Reductn	0	0		0		0		0	0		0	0
Spillback Cap Reductn	0	0		0		0		0	0		0	0
Storage Cap Reductn	0	0		0		0		0	0		0	0
Reduced v/c Ratio	0.50	0.58		0.06		1.26		0.14	0.92		0.43	0.82

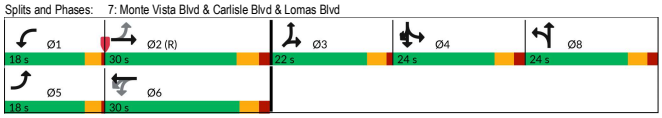
Intersection Summary			
Area Type:	Other		
Cycle Length: 118			
Actuated Cycle Length: 118			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 84.6		Intersection LOS: F	
Intersection Capacity Utilization 100.1%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	8.0
Minimum Split (s)	24.0	24.0	22.0	22.0
Total Split (s)	24.0	24.0	22.0	22.0
Total Split (%)	20.3%	20.3%	18.6%	18.6%
Maximum Green (s)	18.5	18.5	17.5	17.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0
Recall Mode	None	None	None	None
Walk Time (s)	0.0	0.0		
Flash Don't Walk (s)	0.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)	17.6	17.6	15.0	15.0
Actuated g/C Ratio	0.15	0.15	0.13	0.13
v/c Ratio	0.64	0.35	0.79	0.40
Control Delay (s/veh)	59.6	7.1	73.4	50.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	7.1	73.4	50.0
LOS	E	A	E	D
Approach Delay (s/veh)			63.0	
Approach LOS			E	
Queue Length 50th (ft)	108	0	134	57
Queue Length 95th (ft)	182	39	#220	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	256	385	267	421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.34	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.962
Flt Protected	0.950			0.950			0.950				0.950	0.999
Satd. Flow (prot)	1805	5057	0	1805	5111	0	1805	1786	0	0	1715	1722
Flt Permitted	0.250			0.196			0.303				0.224	0.993
Satd. Flow (perm)	473	5057	0	372	5111	0	575	1786	0	0	401	1711
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		22			11			18				16
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1515			2652			2313				578
Travel Time (s)		29.5			51.7			52.6				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)											10%	
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	74	424
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

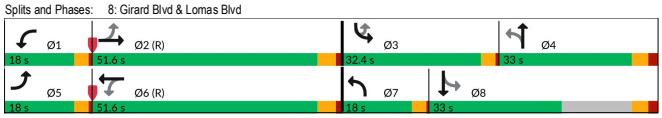
Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (s)	18.0	51.6		18.0	51.6		18.0	33.0		32.4	32.4	33.0
Total Split (%)	13.3%	38.2%		13.3%	38.2%		13.3%	24.4%		24.0%	24.0%	24.4%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	27.5		28.9	28.9	27.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	75.3	66.2		77.8	67.5		45.0	36.6			45.3	41.7
Actuated g/C Ratio	0.56	0.49		0.58	0.50		0.33	0.27			0.34	0.31
v/c Ratio	0.32	0.43		0.45	0.36		0.27	0.77			0.36	0.79
Control Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.7		18.3	22.1		30.0	54.5			32.2	50.7
LOS	B	C		B	C		C	D			C	D
Approach Delay (s/veh)		23.0			21.6			50.7				48.0
Approach LOS		C			C			D				D
Queue Length 50th (ft)	40	216		53	180		41	299			45	322
Queue Length 95th (ft)	77	294		96	246		71	407			76	418
Internal Link Dist (ft)		1435			2572			2233				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	422	2490		374	2559		336	497			423	605
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.26	0.43		0.37	0.36		0.21	0.77			0.17	0.70

Intersection Summary

Area Type: Other
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 30.3 Intersection LOS: C
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Future Volume (vph)	5	98	1074	59	1	43	1097	73	65	22	56	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400		0		190		0	116		1	
Storage Lanes		1		0		1		0	1		1	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor			0.99				1.00				0.99	
Frt			0.992				0.991				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1803	5108	0	0	1804	3573	0	1805	1900	1615	0
Flt Permitted		0.160				0.207			0.483			
Satd. Flow (perm)	0	304	5108	0	0	393	3573	0	918	1900	1595	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				6				136	
Link Speed (mph)			35				35			25		
Link Distance (ft)			1168				1200			392		
Travel Time (s)			22.8				23.4			10.7		
Confl. Peds. (#/hr)		34		34								
Confl. Bikes (#/hr)				22				2			2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	5	102	1119	61	1	45	1143	76	68	23	58	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	1180	0	0	46	1219	0	68	23	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	89	22	205
Future Volume (vph)	89	22	205
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		0
Storage Lanes	0		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			0.99
Frt			0.850
Flt Protected		0.961	
Satd. Flow (prot)	0	1825	1615
Flt Permitted		0.751	
Satd. Flow (perm)	0	1426	1593
Right Turn on Red			Yes
Satd. Flow (RTOR)			214
Link Speed (mph)		25	
Link Distance (ft)		361	
Travel Time (s)		9.8	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			7
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	93	23	214
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	120	214
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	3.0	16.0		3.0	8.0		8.0
Minimum Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (s)	21.6	21.6	44.4		21.6	21.6	44.2		18.0	36.0		36.0
Total Split (%)	18.0%	18.0%	37.0%		18.0%	18.0%	36.8%		15.0%	30.0%		30.0%
Maximum Green (s)	18.1	18.1	38.9		18.1	18.1	38.7		14.5	30.5		30.5
Yellow Time (s)	3.0	3.0	4.0		3.0	3.0	4.0		3.0	3.5		3.5
All-Red Time (s)	0.5	0.5	1.5		0.5	0.5	1.5		0.5	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes			Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		1.5	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		7.0
Flash Don't Walk (s)			13.0				17.0			23.0		22.0
Pedestrian Calls (#/hr)			0				0			0		0
Act Effct Green (s)		83.8	76.2			80.4	73.3		27.7	25.7	120.0	
Actuated g/C Ratio		0.70	0.64			0.67	0.61		0.23	0.21	1.00	
v/c Ratio		0.37	0.36			0.14	0.56		0.25	0.06	0.04	
Control Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)		10.7	12.6			7.5	13.1		35.4	32.7	0.0	
LOS		B	B			A	B		D	C	A	
Approach Delay (s/veh)			12.4				12.9			21.2		
Approach LOS			B				B			C		
Queue Length 50th (ft)		24	158			9	222		42	14	0	
Queue Length 95th (ft)		56	241			25	277		71	32	0	
Internal Link Dist (ft)			1088				1120			312		
Turn Bay Length (ft)		400				190			116		1	
Base Capacity (vph)		442	3247			492	2185		324	767	1595	
Starvation Cap Reductn		0	0			0	0		0	0	0	
Spillback Cap Reductn		0	0			0	0		0	0	0	
Storage Cap Reductn		0	0			0	0		0	0	0	
Reduced v/c Ratio		0.24	0.36			0.09	0.56		0.21	0.03	0.04	

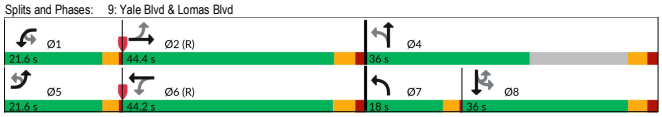
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Lane Group	SBL	SBT	SBR
Detector 2 Extend (s)		0.0	
Turn Type	Perm	NA	Free
Protected Phases		8	
Permitted Phases	8		Free
Detector Phase	8	8	
Switch Phase			
Minimum Initial (s)	8.0	8.0	
Minimum Split (s)	36.0	36.0	
Total Split (s)	36.0	36.0	
Total Split (%)	30.0%	30.0%	
Maximum Green (s)	30.5	30.5	
Yellow Time (s)	3.5	3.5	
All-Red Time (s)	2.0	2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.5	
Lead/Lag	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	
Recall Mode	None	None	
Walk Time (s)	7.0	7.0	
Flash Don't Walk (s)	22.0	22.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)		15.4	120.0
Actuated g/C Ratio		0.13	1.00
v/c Ratio		0.66	0.13
Control Delay (s/veh)		65.8	0.2
Queue Delay		0.0	0.0
Total Delay (s/veh)		65.8	0.2
LOS		E	A
Approach Delay (s/veh)		23.8	
Approach LOS		C	
Queue Length 50th (ft)		90	0
Queue Length 95th (ft)		147	0
Internal Link Dist (ft)		281	
Turn Bay Length (ft)			
Base Capacity (vph)		362	1593
Starvation Cap Reductn		0	0
Spillback Cap Reductn		0	0
Storage Cap Reductn		0	0
Reduced v/c Ratio		0.33	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Yale Blvd & Lomas Blvd



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Future Volume (vph)	5	4	1098	133	18	54	1042	4	148	0	82	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		127		0		270		0	0		0	0
Storage Lanes		1		0		1		0	0		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99	0.98	
Frt			0.984				0.999				0.850	
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1805	5092	0	0	1805	3605	0	0	1805	1615	0
Flt Permitted		0.262				0.177				0.754		
Satd. Flow (perm)	0	493	5092	0	0	334	3605	0	0	1421	1583	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			26				1				85	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1200				1515			171		
Travel Time (s)			23.4				29.5			3.9		
Confl. Peds. (#/hr)	6	6		6	26	26		26	7		7	5
Confl. Bikes (#/hr)				3				15				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	4	1144	139	19	56	1085	4	154	0	85	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	1283	0	0	75	1089	0	0	154	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	36	100		20	37	100		20	34	34	20
Trailing Detector (ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Position(ft)	0	0	0		0	2	0		0	8	8	0
Detector 1 Size(ft)	20	36	100		20	35	100		20	26	26	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	Perm	Perm	NA		custom	pm+pt	NA		Perm	NA	Perm	
Protected Phases			2			1	6			4		
Permitted Phases	2	2			1	6			4		4	8
Detector Phase	2	2	2		1	1	6		4	4	4	8

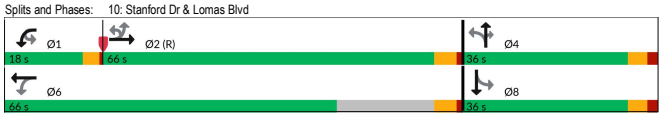
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	5
Future Volume (vph)	0	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.98	
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1614	0
Flt Permitted		
Satd. Flow (perm)	1614	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	107	
Link Speed (mph)	30	
Link Distance (ft)	91	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	5	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0		3.0	3.0	20.0		8.0	8.0	8.0	8.0
Minimum Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (s)	66.0	66.0	66.0		18.0	18.0	66.0		36.0	36.0	36.0	36.0
Total Split (%)	55.0%	55.0%	55.0%		15.0%	15.0%	55.0%		30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	61.0	61.0	61.0		14.5	14.5	61.0		30.5	30.5	30.5	30.5
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0	4.0		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		0.5	0.5	1.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	
Total Lost Time (s)		5.0	5.0			3.5	5.0			5.5	5.5	
Lead/Lag	Lag	Lag	Lag		Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	4.0	4.0	4.0		2.0	2.0	4.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None	Max		None	None	None	None
Walk Time (s)		7.0	7.0				7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)		17.0	17.0				10.0		25.0	25.0	25.0	23.0
Pedestrian Calls (#/hr)		0	0				0		0	0	0	0
Act Effct Green (s)		83.7	83.7			92.9	91.4			18.1	18.1	
Actuated g/C Ratio		0.70	0.70			0.77	0.76			0.15	0.15	
v/c Ratio		0.03	0.36			0.23	0.40			0.72	0.27	
Control Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	
Total Delay (s/veh)		2.2	2.1			5.6	5.9			66.3	10.8	
LOS		A	A			A	A			E	B	
Approach Delay (s/veh)			2.1				5.9			46.6		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	37			11	128			115	0	
Queue Length 95th (ft)		m2	43			30	207			177	42	
Internal Link Dist (ft)			1120				1435			91		
Turn Bay Length (ft)		127				270						
Base Capacity (vph)		344	3561			436	2745			361	465	
Starvation Cap Reductn		0	0			0	0			0	0	
Spillback Cap Reductn		0	0			0	0			0	0	
Storage Cap Reductn		0	0			0	0			0	0	
Reduced v/c Ratio		0.03	0.36			0.17	0.40			0.43	0.18	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay (s/veh): 7.7 Intersection LOS: A
Intersection Capacity Utilization 75.8% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Stanford Dr & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	36.0	
Total Split (s)	36.0	
Total Split (%)	30.0%	
Maximum Green (s)	30.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	18.1	
Actuated g/C Ratio	0.15	
v/c Ratio	0.01	
Control Delay (s/veh)	0.0	
Queue Delay	0.0	
Total Delay (s/veh)	0.0	
LOS	A	
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)	0	
Queue Length 95th (ft)	0	
Internal Link Dist (ft)	11	
Turn Bay Length (ft)		
Base Capacity (vph)	490	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.01	

Intersection Summary

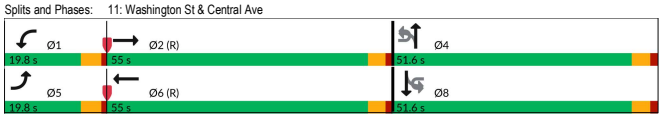
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	10	32	366	19	15	36	400	22	15	224	22	9
Future Volume (vph)	10	32	366	19	15	36	400	22	15	224	22	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		130		0		130		0	85		0	165
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00				1.00		1.00	1.00		0.99
Frt			0.993				0.992			0.987		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	1883	0	1805	1869	0	1805
Flt Permitted		0.242				0.182			0.245			0.320
Satd. Flow (perm)	0	446	1881	0	0	346	1883	0	463	1869	0	603
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3			4		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1368				928			697		
Travel Time (s)			26.6				18.1			15.8		
Confl. Peds. (#/hr)	13	13		13					4		4	6
Confl. Bikes (#/hr)				1				1			12	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	33	381	20	16	38	417	23	16	233	23	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	401	0	0	54	440	0	16	256	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		35	35		37
Trailing Detector (ft)	0	2	0		0	1	0		2	2		2
Detector 1 Position(ft)	0	2	0		0	1	0		2	2		2
Detector 1 Size(ft)	20	34	100		20	35	100		33	33		35
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	243	37
Future Volume (vph)	243	37
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.980	
Flt Protected		
Satd. Flow (prot)	1852	0
Flt Permitted		
Satd. Flow (perm)	1852	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	3147	
Travel Time (s)	71.5	
Confl. Peds. (#/hr)		6
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	253	39
Shared Lane Traffic (%)		
Lane Group Flow (vph)	292	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	37	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	35	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	1.0	4.0	16.0		12.0	4.0	16.0		1.0	1.0		12.0
Minimum Split (s)	51.6	16.8	51.6		51.6	16.8	51.6		51.6	51.6		51.6
Total Split (s)	51.6	19.8	55.0		51.6	19.8	55.0		51.6	51.6		51.6
Total Split (%)	40.8%	15.7%	43.5%		40.8%	15.7%	43.5%		40.8%	40.8%		40.8%
Maximum Green (s)	46.6	14.8	50.5		46.6	14.8	50.5		46.6	46.6		46.6
Yellow Time (s)	3.5	4.0	3.5		3.5	4.0	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	4.5			5.0	4.5		5.0	5.0		5.0
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	23.0		11.0		22.0		9.0		23.0	23.0		22.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		18.1	64.7			22.0	71.2		25.2	25.2		25.2
Actuated g/C Ratio		0.14	0.51			0.17	0.56		0.20	0.20		0.20
v/c Ratio		0.68	0.42			0.90	0.41		0.17	0.68		0.08
Control Delay (s/veh)		95.8	23.2			142.7	20.9		43.5	54.8		39.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		95.8	23.2			142.7	20.9		43.5	54.8		39.0
LOS		F	C			F	C		D	D		D
Approach Delay (s/veh)			30.3				34.2			54.1		
Approach LOS			C				C			D		
Queue Length 50th (ft)		34	201			43	209		11	193		6
Queue Length 95th (ft)		74	347			#117	380		31	263		20
Internal Link Dist (ft)			1288				848			617		
Turn Bay Length (ft)		130				130			85			165
Base Capacity (vph)		68	963			61	1061		170	691		222
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		0.63	0.42			0.89	0.41		0.09	0.37		0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 126.4			
Actuated Cycle Length: 126.4			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 41.8		Intersection LOS: D	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 11: Washington St & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	51.6	
Total Split (s)	51.6	
Total Split (%)	40.8%	
Maximum Green (s)	46.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	22.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	25.2	
Actuated g/C Ratio	0.20	
v/c Ratio	0.78	
Control Delay (s/veh)	60.6	
Queue Delay	0.0	
Total Delay (s/veh)	60.6	
LOS	E	
Approach Delay (s/veh)	60.0	
Approach LOS	E	
Queue Length 50th (ft)	223	
Queue Length 95th (ft)	301	
Internal Link Dist (ft)	3067	
Turn Bay Length (ft)		
Base Capacity (vph)	687	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.43	

Intersection Summary

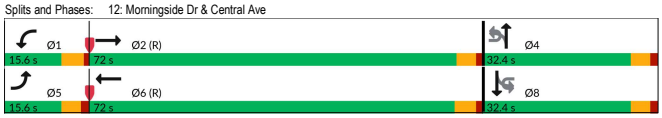
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	19	400	9	7	18	426	7	7	26	3	4
Future Volume (vph)	9	19	400	9	7	18	426	7	7	26	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		160		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00			0.99	1.00			0.99		
Frt			0.997				0.998			0.989		
Flt Protected		0.950				0.950				0.991		
Satd. Flow (prot)	0	1805	1893	0	0	1805	1895	0	0	1856	0	0
Flt Permitted		0.506				0.533				0.924		
Satd. Flow (perm)	0	948	1893	0	0	1001	1895	0	0	1726	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1397				1368			462		
Travel Time (s)			27.2				26.6			10.5		
Confl. Peds. (#/hr)	7	7		7	6	6		6	10		10	9
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	20	417	9	7	19	444	7	7	27	3	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	426	0	0	26	451	0	0	37	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1		1	1	1		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	30		20
Trailing Detector (ft)	0	2	0		0	2	0		0	10		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	10		0
Detector 1 Size(ft)	20	33	100		20	33	100		20	20		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	58	10
Future Volume (vph)	58	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.982	
Flt Protected	0.997	
Satd. Flow (prot)	1850	0
Flt Permitted	0.982	
Satd. Flow (perm)	1821	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	6	
Link Speed (mph)	30	
Link Distance (ft)	277	
Travel Time (s)	6.3	
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	60	10
Shared Lane Traffic (%)		
Lane Group Flow (vph)	74	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	30	
Trailing Detector (ft)	10	
Detector 1 Position(ft)	10	
Detector 1 Size(ft)	20	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	16.0		6.0	4.0	16.0		6.0	6.0		6.0
Minimum Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (s)	32.4	15.6	72.0		32.4	15.6	72.0		32.4	32.4		32.4
Total Split (%)	27.0%	13.0%	60.0%		27.0%	13.0%	60.0%		27.0%	27.0%		27.0%
Maximum Green (s)	27.4	10.6	67.5		27.4	10.6	67.0		27.4	27.4		27.4
Yellow Time (s)	3.5	3.5	3.5		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	4.5			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	31.0		20.0		31.0		19.0		31.0	31.0		31.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.7	93.4			10.0	92.6			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.77			0.08		
v/c Ratio		0.35	0.29			0.31	0.31			0.26		
Control Delay (s/veh)		60.6	6.8			59.7	7.4			51.8		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.6	6.8			59.7	7.4			51.8		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			10.3				10.3			51.8		
Approach LOS			B				B			D		
Queue Length 50th (ft)		22	106			19	119			25		
Queue Length 95th (ft)		51	203			48	224			59		
Internal Link Dist (ft)			1317				1288			382		
Turn Bay Length (ft)		160				160						
Base Capacity (vph)		96	1474			99	1462			396		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.30	0.29			0.26	0.31			0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 15.2		Intersection LOS: B	
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Morningside Dr & Central Ave



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	32.4	
Total Split (s)	32.4	
Total Split (%)	27.0%	
Maximum Green (s)	27.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	31.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.49	
Control Delay (s/veh)	58.4	
Queue Delay	0.0	
Total Delay (s/veh)	58.4	
LOS	E	
Approach Delay (s/veh)	58.4	
Approach LOS	E	
Queue Length 50th (ft)	51	
Queue Length 95th (ft)	99	
Internal Link Dist (ft)	197	
Turn Bay Length (ft)		
Base Capacity (vph)	420	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.18	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	12	90	353	66	8	54	364	49	32	263	19	65
Future Volume (vph)	12	90	353	66	8	54	364	49	32	263	19	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		180		180		128		120	120		0	163
Storage Lanes		1		1		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96		0.92		0.99		0.96	0.99	1.00		0.99
Frt				0.850				0.850		0.990		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	1615	1805	1874	0	1805
Flt Permitted		0.152				0.187			0.348			0.243
Satd. Flow (perm)	0	278	1900	1489	0	351	1900	1551	652	1874	0	455
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				104				104		3		
Link Speed (mph)			35				35			30		
Link Distance (ft)			1137				1397			906		
Travel Time (s)			22.1				27.2			20.6		
Confl. Peds. (#/hr)	16	16		16	5	5		5	12		12	13
Confl. Bikes (#/hr)				2				5			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	94	368	69	8	56	379	51	33	274	20	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	107	368	69	0	64	379	51	33	294	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	1	1	1	1	1	1	1	1		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	37	100	10	20	37	100	10	35	35		27
Trailing Detector (ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Position(ft)	0	2	0	2	0	2	0	2	2	2		6
Detector 1 Size(ft)	20	35	100	8	20	35	100	8	33	33		21
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA	Perm	pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5			2	1			6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	218	50
Future Volume (vph)	218	50
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.972	
Flt Protected		
Satd. Flow (prot)	1829	0
Flt Permitted		
Satd. Flow (perm)	1829	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	9	
Link Speed (mph)	30	
Link Distance (ft)	173	
Travel Time (s)	3.9	
Confl. Peds. (#/hr)		13
Confl. Bikes (#/hr)		4
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	227	52
Shared Lane Traffic (%)		
Lane Group Flow (vph)	279	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	27	
Trailing Detector (ft)	6	
Detector 1 Position(ft)	6	
Detector 1 Size(ft)	21	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

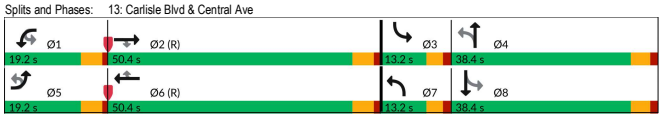
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0	16.0	4.0	6.0		4.0
Minimum Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	12.0	38.4		12.0
Total Split (s)	19.2	19.2	50.4	50.4	19.2	19.2	50.4	50.4	13.2	38.4		13.2
Total Split (%)	15.8%	15.8%	41.6%	41.6%	15.8%	15.8%	41.6%	41.6%	10.9%	31.7%		10.9%
Maximum Green (s)	14.2	14.2	45.4	45.4	14.2	14.2	45.4	45.4	8.7	33.4		8.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0	5.0		5.0	5.0	5.0	4.5	5.0		4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		
Flash Don't Walk (s)			10.0	10.0			13.0	13.0		21.0		
Pedestrian Calls (#/hr)			0	0			0	0		0		
Act Effct Green (s)		26.4	50.3	50.3		21.4	45.4	45.4	30.5	24.1		32.8
Actuated g/C Ratio		0.22	0.42	0.42		0.18	0.37	0.37	0.25	0.20		0.27
v/c Ratio		1.78	0.47	0.10		1.03	0.53	0.08	0.14	0.78		0.32
Control Delay (s/veh)		443.9	29.9	1.9		176.2	33.0	0.2	28.4	60.0		32.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)		443.9	29.9	1.9		176.2	33.0	0.2	28.4	60.0		32.6
LOS		F	C	A		F	C	A	C	E		C
Approach Delay (s/veh)			107.7				48.2			56.8		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~131	221	0		50	229	0	18	218		38
Queue Length 95th (ft)		#263	317	12		#161	328	0	39	296		67
Internal Link Dist (ft)			1057				1317			826		
Turn Bay Length (ft)		180		180		128		120	120			163
Base Capacity (vph)		60	789	679		62	711	646	252	518		220
Starvation Cap Reductn		0	0	0		0	0	0	0	0		0
Spillback Cap Reductn		0	0	0		0	0	0	0	0		0
Storage Cap Reductn		0	0	0		0	0	0	0	0		0
Reduced v/c Ratio		1.78	0.47	0.10		1.03	0.53	0.08	0.13	0.57		0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 121.2			
Actuated Cycle Length: 121.2			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.78			
Intersection Signal Delay (s/veh): 68.4		Intersection LOS: E	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	38.4	
Total Split (s)	38.4	
Total Split (%)	31.7%	
Maximum Green (s)	33.4	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	23.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	27.1	
Actuated g/C Ratio	0.22	
v/c Ratio	0.67	
Control Delay (s/veh)	49.6	
Queue Delay	0.0	
Total Delay (s/veh)	49.6	
LOS	D	
Approach Delay (s/veh)	46.3	
Approach LOS	D	
Queue Length 50th (ft)	197	
Queue Length 95th (ft)	277	
Internal Link Dist (ft)	93	
Turn Bay Length (ft)		
Base Capacity (vph)	510	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.55	
Intersection Summary		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Carlisle Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	14	9	464	34	2	22	401	14	9	16	19	14
Future Volume (vph)	14	9	464	34	2	22	401	14	9	16	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100		0		100		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	1.00			1.00	1.00			0.94		
Frt			0.990				0.995			0.941		
Flt Protected		0.950				0.950				0.990		
Satd. Flow (prot)	0	1805	1872	0	0	1805	1889	0	0	1690	0	0
Flt Permitted		0.533				0.541				0.940		
Satd. Flow (perm)	0	969	1872	0	0	1026	1889	0	0	1581	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			5				2			20		
Link Speed (mph)			35				35			25		
Link Distance (ft)			756				1137			234		
Travel Time (s)			14.7				22.1			6.4		
Confl. Peds. (#/hr)	16	16		16	1	1		1	36		36	45
Confl. Bikes (#/hr)				2				1			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	9	483	35	2	23	418	15	9	17	20	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	518	0	0	25	433	0	0	46	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	1		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	100		20
Trailing Detector (ft)	0	2	0		0	2	0		0	0		0
Detector 1 Position(ft)	0	2	0		0	2	0		0	0		0
Detector 1 Size(ft)	20	33	6		20	33	100		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94							94		
Detector 2 Size(ft)			6							6		
Detector 2 Type			Cl+Ex							Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	22	14
Future Volume (vph)	22	14
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.94	
Frt	0.962	
Flt Protected	0.986	
Satd. Flow (prot)	1740	0
Flt Permitted	0.925	
Satd. Flow (perm)	1591	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	15	
Link Speed (mph)	25	
Link Distance (ft)	54	
Travel Time (s)	1.5	
Confl. Peds. (#/hr)		45
Confl. Bikes (#/hr)		3
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	23	15
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	25	
Trailing Detector (ft)	2	
Detector 1 Position(ft)	2	
Detector 1 Size(ft)	23	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0							0.0		
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	5.0	5.0	16.0		1.0	1.0	16.0		1.0	1.0		8.0
Minimum Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (s)	15.6	15.6	70.8		15.6	15.6	70.8		33.6	33.6		33.6
Total Split (%)	13.0%	13.0%	59.0%		13.0%	13.0%	59.0%		28.0%	28.0%		28.0%
Maximum Green (s)	11.1	11.1	65.8		11.1	11.1	65.8		28.6	28.6		28.6
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	4.0		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.5		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	5.0			4.5	5.0			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			11.0				9.0		21.0	21.0		20.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		10.0	94.3			10.0	94.2			8.7		
Actuated g/C Ratio		0.08	0.79			0.08	0.79			0.07		
v/c Ratio		0.30	0.35			0.29	0.29			0.35		
Control Delay (s/veh)		64.8	4.3			58.7	6.4			41.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		64.8	4.3			58.7	6.4			41.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			7.0				9.3			41.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		19	73			19	102			19		
Queue Length 95th (ft)		50	98			46	198			57		
Internal Link Dist (ft)			676				1057			154		
Turn Bay Length (ft)		100				100						
Base Capacity (vph)		98	1471			103	1484			392		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.24	0.35			0.24	0.29			0.12		

Intersection Summary

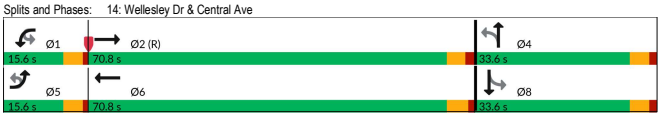
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.39

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	33.6	
Total Split (s)	33.6	
Total Split (%)	28.0%	
Maximum Green (s)	28.6	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.2	
Actuated g/C Ratio	0.08	
v/c Ratio	0.39	
Control Delay (s/veh)	48.4	
Queue Delay	0.0	
Total Delay (s/veh)	48.4	
LOS	D	
Approach Delay (s/veh)	48.4	
Approach LOS	D	
Queue Length 50th (ft)	29	
Queue Length 95th (ft)	69	
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)	390	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.14	

Intersection Summary

Intersection Signal Delay (s/veh): 11.4 Intersection LOS: B
Intersection Capacity Utilization 53.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 14: Wellesley Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	9	17	483	26	6	17	398	9	16	24	11	8
Future Volume (vph)	9	17	483	26	6	17	398	9	16	24	11	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	1.00			0.99	1.00			0.97		
Frt			0.992				0.997			0.972		
Flt Protected		0.950				0.950				0.984		
Satd. Flow (prot)	0	1805	1880	0	0	1805	1893	0	0	1786	0	0
Flt Permitted		0.519				0.556				0.872		
Satd. Flow (perm)	0	966	1880	0	0	1051	1893	0	0	1567	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			4				2			10		
Link Speed (mph)			35				35			25		
Link Distance (ft)			747				756			318		
Travel Time (s)			14.6				14.7			8.7		
Confl. Peds. (#/hr)	7	7		7	2	2		2	25		25	22
Confl. Bikes (#/hr)				1				6			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	18	503	27	6	18	415	9	17	25	11	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	530	0	0	24	424	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	32	100		20	32	100		20	35		20
Trailing Detector (ft)	0	3	0		0	3	0		0	5		0
Detector 1 Position(ft)	0	3	0		0	3	0		0	5		0
Detector 1 Size(ft)	20	29	6		20	29	6		20	30		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	47	5
Future Volume (vph)	47	5
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.989	
Flt Protected	0.994	
Satd. Flow (prot)	1861	0
Flt Permitted	0.964	
Satd. Flow (perm)	1793	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	3	
Link Speed (mph)	25	
Link Distance (ft)	224	
Travel Time (s)	6.1	
Confl. Peds. (#/hr)		22
Confl. Bikes (#/hr)		6
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	49	5
Shared Lane Traffic (%)		
Lane Group Flow (vph)	62	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	35	
Trailing Detector (ft)	7	
Detector 1 Position(ft)	7	
Detector 1 Size(ft)	28	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	4				8				4			8
Detector Phase	4	5	2		8	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	8.0	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (s)	31.2	15.6	73.2		31.2	15.6	73.2		31.2	31.2		31.2
Total Split (%)	26.0%	13.0%	61.0%		26.0%	13.0%	61.0%		26.0%	26.0%		26.0%
Maximum Green (s)	26.2	10.6	68.2		26.2	10.6	68.2		26.2	26.2		26.2
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0	4.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.0	1.0		1.5	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	5.0			5.0	5.0			5.0		
Lead/Lag		Lead	Lag			Lead	Lag					
Lead-Lag Optimize?		Yes	Yes			Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)	7.0		7.0		7.0		7.0		7.0	7.0		7.0
Flash Don't Walk (s)	18.0		7.0		19.0		8.0		18.0	18.0		19.0
Pedestrian Calls (#/hr)	0		0		0		0		0	0		0
Act Effct Green (s)		10.3	93.7			9.7	93.2			9.7		
Actuated g/C Ratio		0.09	0.78			0.08	0.78			0.08		
v/c Ratio		0.33	0.36			0.28	0.29			0.39		
Control Delay (s/veh)		60.3	7.3			70.2	3.9			52.0		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		60.3	7.3			70.2	3.9			52.0		
LOS		E	A			E	A			D		
Approach Delay (s/veh)			9.8				7.4			52.0		
Approach LOS			A				A			D		
Queue Length 50th (ft)		20	140			19	54			32		
Queue Length 95th (ft)		49	259			49	79			73		
Internal Link Dist (ft)			667				676			238		
Turn Bay Length (ft)		120				110						
Base Capacity (vph)		96	1469			102	1471			349		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.28	0.36			0.24	0.29			0.15		

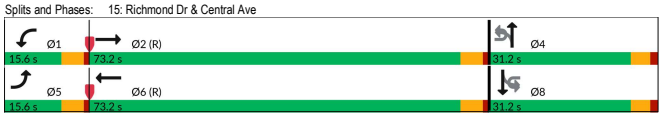
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	31.2	
Total Split (s)	31.2	
Total Split (%)	26.0%	
Maximum Green (s)	26.2	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	19.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.7	
Actuated g/C Ratio	0.08	
v/c Ratio	0.42	
Control Delay (s/veh)	58.2	
Queue Delay	0.0	
Total Delay (s/veh)	58.2	
LOS	E	
Approach Delay (s/veh)	58.2	
Approach LOS	E	
Queue Length 50th (ft)	44	
Queue Length 95th (ft)	88	
Internal Link Dist (ft)	144	
Turn Bay Length (ft)		
Base Capacity (vph)	393	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.16	

Intersection Summary	

Intersection Signal Delay (s/veh): 13.6	Intersection LOS: B
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Richmond Dr & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	11	26	553	26	13	32	505	44	14	14	25	33
Future Volume (vph)	11	26	553	26	13	32	505	44	14	14	25	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		0		110		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97	1.00			0.97	0.99			0.98		
Frt			0.993				0.988			0.937		
Flt Protected		0.950				0.950				0.987		
Satd. Flow (prot)	0	1805	3574	0	0	1805	3548	0	0	1731	0	0
Flt Permitted		0.556				0.500				0.873		
Satd. Flow (perm)	0	1025	3574	0	0	925	3548	0	0	1527	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			6				13			26		
Link Speed (mph)			30				30			30		
Link Distance (ft)			743				766			386		
Travel Time (s)			16.9				17.4			8.8		
Confl. Peds. (#/hr)	19	19		19	18	18		18	13		13	11
Confl. Bikes (#/hr)				1				2			15	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	27	576	27	14	33	526	46	15	15	26	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	603	0	0	47	572	0	0	56	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	35	100		20	35	100		20	36		20
Trailing Detector (ft)	0	1	0		0	1	0		0	4		0
Detector 1 Position(ft)	0	1	0		0	1	0		0	4		0
Detector 1 Size(ft)	20	34	6		20	34	6		20	32		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	34	43
Future Volume (vph)	34	43
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.99	
Frt	0.947	
Flt Protected	0.985	
Satd. Flow (prot)	1754	0
Flt Permitted	0.892	
Satd. Flow (perm)	1585	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	167	
Travel Time (s)	3.8	
Confl. Peds. (#/hr)		11
Confl. Bikes (#/hr)		7
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	35	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	114	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	36	
Trailing Detector (ft)	3	
Detector 1 Position(ft)	3	
Detector 1 Size(ft)	33	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			4		
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		4	4		8
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0		4.0	4.0	16.0		8.0	8.0		8.0
Minimum Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.8	32.8		32.8
Total Split (s)	14.4	14.4	32.8		14.4	14.4	32.8		32.9	32.9		32.9
Total Split (%)	18.0%	18.0%	40.9%		18.0%	18.0%	40.9%		41.1%	41.1%		41.1%
Maximum Green (s)	9.9	9.9	28.3		9.9	9.9	28.3		27.9	27.9		27.9
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		4.5	4.5			4.5	4.5			5.0		
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Don't Walk (s)			10.0				9.0		21.0	21.0		21.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		9.7	53.6			10.8	54.4			9.8		
Actuated g/C Ratio		0.12	0.67			0.13	0.68			0.12		
v/c Ratio		0.31	0.25			0.38	0.24			0.27		
Control Delay (s/veh)		37.0	8.9			38.7	8.2			22.6		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay (s/veh)		37.0	8.9			38.7	8.2			22.6		
LOS		D	A			D	A			C		
Approach Delay (s/veh)			10.6				10.5			22.6		
Approach LOS			B				B			C		
Queue Length 50th (ft)		18	72			22	63			14		
Queue Length 95th (ft)		43	137			51	124			45		
Internal Link Dist (ft)			663				686			306		
Turn Bay Length (ft)		160				110						
Base Capacity (vph)		143	2391			138	2413			548		
Starvation Cap Reductn		0	0			0	0			0		
Spillback Cap Reductn		0	0			0	0			0		
Storage Cap Reductn		0	0			0	0			0		
Reduced v/c Ratio		0.27	0.25			0.34	0.24			0.10		

Intersection Summary

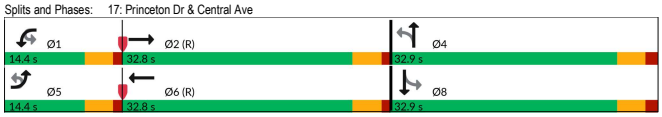
Area Type: Other
Cycle Length: 80.1
Actuated Cycle Length: 80.1
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	32.8	
Total Split (s)	32.9	
Total Split (%)	41.1%	
Maximum Green (s)	27.9	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	21.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	9.8	
Actuated g/C Ratio	0.12	
v/c Ratio	0.49	
Control Delay (s/veh)	27.7	
Queue Delay	0.0	
Total Delay (s/veh)	27.7	
LOS	C	
Approach Delay (s/veh)	27.7	
Approach LOS	C	
Queue Length 50th (ft)	33	
Queue Length 95th (ft)	77	
Internal Link Dist (ft)	87	
Turn Bay Length (ft)		
Base Capacity (vph)	581	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.20	

Intersection Summary

Intersection Signal Delay (s/veh): 12.4	Intersection LOS: B
Intersection Capacity Utilization 44.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Princeton Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	562	14	14	7	525	12	2	3	17	17	3
Future Volume (vph)	26	562	14	14	7	525	12	2	3	17	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	145		0		100		0	0		0	0	
Storage Lanes	1		0		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.98	1.00			0.97		0.99	0.97
Frt		0.996				0.997			0.894			0.862
Flt Protected	0.950				0.950				0.996		0.950	
Satd. Flow (prot)	1805	3594	0	0	1805	3597	0	0	1643	0	1805	1596
Flt Permitted	0.950				0.909				0.964		0.755	
Satd. Flow (perm)	1805	3594	0	0	1691	3597	0	0	1588	0	1416	1596
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		3				3			18			35
Link Speed (mph)		30				30			30			30
Link Distance (ft)		378				743			579			153
Travel Time (s)		8.6				16.9			13.2			3.5
Confl. Peds. (#/hr)				14	14		14	19		19	16	
Confl. Bikes (#/hr)			1				6			16		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	27	585	15	15	7	547	13	2	3	18	18	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	600	0	0	22	560	0	0	23	0	18	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			0			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	36	100		20	36		36	36
Trailing Detector (ft)	2	0		0	2	0		0	2		2	2
Detector 1 Position(ft)	2	0		0	2	0		0	2		2	2
Detector 1 Size(ft)	34	6		20	34	6		20	34		34	34
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	34
Future Volume (vph)	34
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	16
Confl. Bikes (#/hr)	4
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	35
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

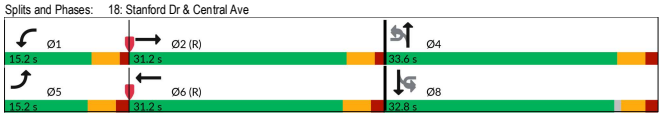
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		Perm	NA		Perm	NA
Protected Phases	5	2			1	6			4			8
Permitted Phases				8				4			8	
Detector Phase	5	2		8	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	4.0	16.0		8.0	4.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (s)	15.2	31.2		32.8	15.2	31.2		33.6	33.6		32.8	32.8
Total Split (%)	19.0%	39.0%		41.0%	19.0%	39.0%		42.0%	42.0%		41.0%	41.0%
Maximum Green (s)	10.2	26.7		28.3	10.7	26.2		28.6	28.6		28.3	28.3
Yellow Time (s)	3.5	3.5		3.0	3.5	3.5		3.5	3.5		3.0	3.0
All-Red Time (s)	1.5	1.0		1.5	1.0	1.5		1.5	1.5		1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)	5.0	4.5			4.5	5.0			5.0		4.5	4.5
Lead/Lag	Lead	Lag			Lead	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None		None	None
Walk Time (s)		7.0		7.0		7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		8.0		21.0		19.0		22.0	22.0		21.0	21.0
Pedestrian Calls (#/hr)		0		0		0		0	0		0	0
Act Effct Green (s)	6.8	63.3			8.3	64.0			8.0		8.3	8.3
Actuated g/C Ratio	0.09	0.79			0.10	0.80			0.10		0.10	0.10
v/c Ratio	0.18	0.21			0.13	0.19			0.13		0.12	0.19
Control Delay (s/veh)	36.2	4.9			32.5	4.4			19.7		34.6	15.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay (s/veh)	36.2	4.9			32.5	4.4			19.7		34.6	15.7
LOS	D	A			C	A			B		C	B
Approach Delay (s/veh)		6.3				5.4			19.7			21.7
Approach LOS		A				A			B			C
Queue Length 50th (ft)	13	30			10	28			2		8	1
Queue Length 95th (ft)	36	103			30	86			24		28	28
Internal Link Dist (ft)		298				663			499			73
Turn Bay Length (ft)	145				100							
Base Capacity (vph)	230	2843			233	2879			579		515	602
Starvation Cap Reductn	0	0			0	0			0		0	0
Spillback Cap Reductn	0	0			0	0			0		0	0
Storage Cap Reductn	0	0			0	0			0		0	0
Reduced v/c Ratio	0.12	0.21			0.09	0.19			0.04		0.03	0.06

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.21	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Stanford Dr & Central Ave



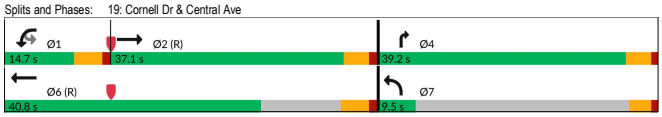
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	587	58	1	33	533	22	22
Future Volume (vph)	587	58	1	33	533	22	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		60		0	0
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	0.99					0.96	
Frt	0.987						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3526	0	0	1805	3610	1805	1615
Flt Permitted				0.580		0.950	
Satd. Flow (perm)	3526	0	0	1102	3610	1736	1615
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	13						23
Link Speed (mph)	30				30	30	
Link Distance (ft)	750				378	329	
Travel Time (s)	17.0				8.6	7.5	
Confl. Peds. (#/hr)		10				49	49
Confl. Bikes (#/hr)		70					15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	611	60	1	34	555	23	23
Shared Lane Traffic (%)							
Lane Group Flow (vph)	671	0	0	35	555	23	23
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	25	100	36	36
Trailing Detector (ft)	0		0	15	0	4	4
Detector 1 Position(ft)	0		0	15	0	4	4
Detector 1 Size(ft)	6		20	10	6	32	32
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Prot
Protected Phases	2			1	6	7	4
Permitted Phases			1				
Detector Phase	2		1	1	6	7	4
Switch Phase							
Minimum Initial (s)	13.2		4.0	4.0	16.0	1.0	8.0
Minimum Split (s)	26.4		14.4	14.4	40.8	5.0	39.2
Total Split (s)	37.1		14.7	14.7	40.8	9.5	39.2
Total Split (%)	40.8%		16.2%	16.2%	44.8%	10.4%	43.1%
Maximum Green (s)	32.6		9.7	9.7	35.8	5.5	34.7
Yellow Time (s)	3.5		4.0	4.0	4.0	3.0	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5			5.0	5.0	4.0	4.5
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	None	C-Max	None	None
Walk Time (s)	7.0				7.0		
Flash Don't Walk (s)	10.0				0.0		
Pedestrian Calls (#/hr)	0				0		
Act Effct Green (s)	73.4			9.3	84.0	6.9	8.0
Actuated g/C Ratio	0.81			0.10	0.92	0.08	0.09
v/c Ratio	0.24			0.31	0.17	0.17	0.14
Control Delay (s/veh)	4.9			43.5	1.1	41.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9			43.5	1.1	41.5	18.0
LOS	A			D	A	D	B
Approach Delay (s/veh)	4.9				3.7	29.8	
Approach LOS	A				A	C	
Queue Length 50th (ft)	36			19	0	13	0
Queue Length 95th (ft)	121			46	37	36	24
Internal Link Dist (ft)	670				298	249	
Turn Bay Length (ft)				60			
Base Capacity (vph)	2845			132	3332	698	630
Starvation Cap Reductn	0			0	0	0	0
Spillback Cap Reductn	0			0	0	0	0
Storage Cap Reductn	0			0	0	0	0
Reduced v/c Ratio	0.24			0.27	0.17	0.03	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 91	
Actuated Cycle Length: 91	
Offset: 22.5 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.31	

Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Cornell Dr & Central Ave



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	513	82	3	84	471	9	93	25	94	18	27
Future Volume (vph)	17	513	82	3	84	471	9	93	25	94	18	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0		120		0	80		80	0	
Storage Lanes	1		0		1		0	1		1	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.99				1.00		0.99		0.98	0.99	0.99
Frt		0.979				0.997				0.850		0.924
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	3488	0	0	1805	3595	0	1805	1900	1615	1805	1732
Flt Permitted	0.950				0.079			0.451			0.740	
Satd. Flow (perm)	1742	3488	0	0	150	3595	0	852	1900	1584	1391	1732
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		14				2				132		29
Link Speed (mph)		30				30			25			25
Link Distance (ft)		1412				750			1232			105
Travel Time (s)		32.1				17.0			33.6			2.9
Confl. Peds. (#/hr)	23		23	14	14		14	5		5	8	
Confl. Bikes (#/hr)			4				2			1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	534	85	3	88	491	9	97	26	98	19	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	619	0	0	91	500	0	97	26	98	19	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane									Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	1	1	1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	36	100		20	36	100		30	30	30	35	35
Trailing Detector (ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Position(ft)	1	0		0	2	0		3	3	3	3	3
Detector 1 Size(ft)	35	6		20	34	6		27	27	27	32	32
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		Cl+Ex				Cl+Ex						
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	28
Future Volume (vph)	28
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	29
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0				0.0						
Turn Type	Prot	NA		custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2			1	6		7	4		3	8
Permitted Phases				1				4		4	8	
Detector Phase	5	2		1	1	6		7	4	4	3	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		4.0	4.0	12.0		3.8	8.0	8.0	3.8	8.0
Minimum Split (s)	11.2	26.4		11.2	11.2	26.4		8.8	33.6	33.6	8.8	33.6
Total Split (s)	15.4	56.0		28.0	28.0	68.6		21.0	40.6	40.6	15.4	35.0
Total Split (%)	11.0%	40.0%		20.0%	20.0%	49.0%		15.0%	29.0%	29.0%	11.0%	25.0%
Maximum Green (s)	10.4	51.0		23.0	23.0	63.6		16.0	35.6	35.6	10.4	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5		1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0			5.0	5.0		5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	None	C-Max		None	None	None	None	None
Walk Time (s)		7.0				7.0			7.0	7.0		7.0
Flash Don't Walk (s)		15.0				16.0			24.0	24.0		22.0
Pedestrian Calls (#/hr)		0				0			0	0		0
Act Effct Green (s)	7.0	51.0			50.4	101.1		23.6	16.1	16.1	14.1	9.0
Actuated g/C Ratio	0.05	0.36			0.36	0.72		0.17	0.12	0.12	0.10	0.06
v/c Ratio	0.20	0.48			1.72	0.19		0.43	0.12	0.33	0.12	0.41
Control Delay (s/veh)	68.4	35.1			414.5	8.2		54.6	55.8	6.2	46.6	44.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.4	35.1			414.5	8.2		54.6	55.8	6.2	46.6	44.1
LOS	E	D			F	A		D	E	A	D	D
Approach Delay (s/veh)		36.0				70.8			33.3			44.8
Approach LOS		D				E			C			D
Queue Length 50th (ft)	16	222			~123	61		78	22	0	15	25
Queue Length 95th (ft)	43	281			#213	137		125	51	25	36	70
Internal Link Dist (ft)		1332				670			1152			25
Turn Bay Length (ft)	160				120			80		80		
Base Capacity (vph)	134	1279			53	2596		262	483	501	207	393
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	0.13	0.48			1.72	0.19		0.37	0.05	0.20	0.09	0.15

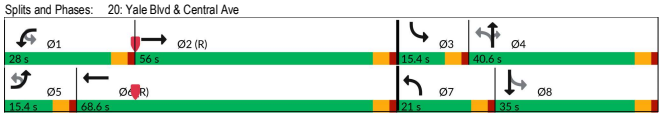
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.72	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 49.5	Intersection LOS: D
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: Yale Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Future Volume (vph)	3	53	420	21	10	47	401	148	46	338	54	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		225		0		215		0	140		0	140
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00
Ped Bike Factor		1.00	1.00			0.94	0.97		0.97	0.99		0.99
Frt			0.993				0.960			0.979		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	1881	0	0	1805	3372	0	1805	5048	0	1805
Flt Permitted		0.103				0.085			0.437			0.222
Satd. Flow (perm)	0	195	1881	0	0	151	3372	0	809	5048	0	419
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				36			16		
Link Speed (mph)			30				30			30		
Link Distance (ft)			1782				1412			1118		
Travel Time (s)			40.5				32.1			25.4		
Confl. Peds. (#/hr)	4	4		4	53	53		53	17		17	8
Confl. Bikes (#/hr)								3			3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	55	438	22	10	49	418	154	48	352	56	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	460	0	0	59	572	0	48	408	0	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	1		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	36	100		20	36	100		40	40		50
Trailing Detector (ft)	0	2	0		0	0	0		0	0		1
Detector 1 Position(ft)	0	2	0		0	0	0		0	0		1
Detector 1 Size(ft)	20	34	6		20	36	6		40	40		49
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	449	72
Future Volume (vph)	449	72
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.91	0.91
Ped Bike Factor	0.99	
Frt	0.979	
Flt Protected		
Satd. Flow (prot)	5046	0
Flt Permitted		
Satd. Flow (perm)	5046	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	18	
Link Speed (mph)	30	
Link Distance (ft)	1079	
Travel Time (s)	24.5	
Confl. Peds. (#/hr)		8
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	468	75
Shared Lane Traffic (%)		
Lane Group Flow (vph)	543	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	1	
Detector Template	Thru	
Leading Detector (ft)	50	
Trailing Detector (ft)	1	
Detector 1 Position(ft)	1	
Detector 1 Size(ft)	49	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA		custom	Prot	NA		pm+pt	NA		pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5				1				4			8
Detector Phase	5	5	2		1	1	6		7	4		3
Switch Phase												
Minimum Initial (s)	4.0	4.0	20.0		4.0	4.0	20.0		4.0	12.0		4.0
Minimum Split (s)	20.8	20.8	70.4		24.0	24.0	73.6		20.8	28.8		36.8
Total Split (s)	21.0	21.0	70.4		24.0	24.0	73.6		22.4	40.6		36.8
Total Split (%)	12.2%	12.2%	40.9%		14.0%	14.0%	42.8%		13.0%	23.6%		21.4%
Maximum Green (s)	16.0	16.0	65.4		19.0	19.0	68.6		17.4	35.6		31.8
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	1.5		1.5	1.5	1.5		1.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		5.0	5.0			5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0
Recall Mode	None	None	C-Max		None	None	C-Max		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			25.0				24.0			24.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		38.8	66.2			47.1	74.5		27.6	18.7		43.7
Actuated g/C Ratio		0.23	0.38			0.27	0.43		0.16	0.11		0.25
v/c Ratio		1.32	0.64			1.44	0.39		0.27	0.72		0.67
Control Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)		295.9	47.8			336.4	32.3		51.1	78.7		64.4
LOS		F	D			F	C		D	E		E
Approach Delay (s/veh)			75.5				60.8			75.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~87	417			~90	210		42	159		168
Queue Length 95th (ft)		#197	553			#206	284		74	197		226
Internal Link Dist (ft)			1702				1332			1038		
Turn Bay Length (ft)		225				215			140			140
Base Capacity (vph)		44	724			41	1480		270	1057		362
Starvation Cap Reductn		0	0			0	0		0	0		0
Spillback Cap Reductn		0	0			0	0		0	0		0
Storage Cap Reductn		0	0			0	0		0	0		0
Reduced v/c Ratio		1.32	0.64			1.44	0.39		0.18	0.39		0.49

Intersection Summary

Area Type: Other
Cycle Length: 172
Actuated Cycle Length: 172
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.44

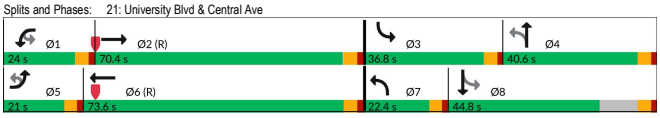
Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	12.0	
Minimum Split (s)	44.8	
Total Split (s)	44.8	
Total Split (%)	26.0%	
Maximum Green (s)	39.8	
Yellow Time (s)	3.5	
All-Red Time (s)	1.5	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Don't Walk (s)	20.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	32.0	
Actuated g/C Ratio	0.19	
v/c Ratio	0.57	
Control Delay (s/veh)	63.9	
Queue Delay	0.0	
Total Delay (s/veh)	63.9	
LOS	E	
Approach Delay (s/veh)	64.1	
Approach LOS	E	
Queue Length 50th (ft)	203	
Queue Length 95th (ft)	235	
Internal Link Dist (ft)	999	
Turn Bay Length (ft)		
Base Capacity (vph)	1479	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.37	

Intersection Summary

Intersection Signal Delay (s/veh): 68.0 Intersection LOS: E
Intersection Capacity Utilization 73.0% ICU Level of Service C
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 21: University Blvd & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Future Volume (vph)	4	0	426	63	6	29	503	0	125	0	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		136		0		112		0	0		70	0
Storage Lanes		1		1		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94		1.00			0.98		0.97	
Frt				0.850							0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	1900	0	1805	1900	1615	0
Flt Permitted		0.437				0.452			0.950			
Satd. Flow (perm)	0	830	1900	1513	0	858	1900	0	1761	1900	1574	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				66							690	
Link Speed (mph)			30				30			25		
Link Distance (ft)			545				1782			256		
Travel Time (s)			12.4				40.5			7.0		
Confl. Peds. (#/hr)	24	24		24	1	1		1	6		6	3
Confl. Bikes (#/hr)								4			6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	0	444	66	6	30	524	0	130	0	67	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	444	66	0	36	524	0	130	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2	1	1	1	2		1	1	1	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru	Right	
Leading Detector (ft)	20	30	100	20	20	35	100		35	35	20	
Trailing Detector (ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Position(ft)	0	7	0	0	0	5	0		3	3	0	
Detector 1 Size(ft)	20	23	6	20	20	30	6		32	32	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	0
Future Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	78	
Travel Time (s)	2.1	
Confl. Peds. (#/hr)		3
Confl. Bikes (#/hr)		1
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA		Prot		Free	
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6					Free	
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	4.0	4.0	16.0	16.0	4.0	4.0	16.0		4.0	16.0		
Minimum Split (s)	9.9	9.9	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (s)	22.5	22.5	42.9	42.9	19.8	19.8	52.8		25.3	47.3		
Total Split (%)	18.4%	18.4%	35.0%	35.0%	16.2%	16.2%	43.1%		20.6%	38.6%		
Maximum Green (s)	17.5	17.5	38.4	38.4	14.8	14.8	48.3		20.3	42.3		
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.0	1.0	1.5	1.5	1.0		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.0	4.5	4.5		5.0	4.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0			4.0		4.0	4.0		
Flash Don't Walk (s)	11.0	11.0	13.0	13.0			10.0		11.0	22.0		
Pedestrian Calls (#/hr)	0	0	0	0			0		0	0		
Act Effct Green (s)		92.4	89.7	89.7		95.2	94.3		16.7		122.6	
Actuated g/C Ratio		0.75	0.73	0.73		0.78	0.77		0.14		1.00	
v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.53		0.04	
Control Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0		0.0	
Total Delay (s/veh)		3.3	7.3	1.7		3.3	5.9		57.6		0.0	
LOS		A	A	A		A	A		E		A	
Approach Delay (s/veh)			6.5				5.7			38.1		
Approach LOS			A				A			D		
Queue Length 50th (ft)		1	122	0		5	98		98		0	
Queue Length 95th (ft)		3	194	14		13	231		160		0	
Internal Link Dist (ft)			465				1702			176		
Turn Bay Length (ft)		136				112					70	
Base Capacity (vph)		788	1389	1124		785	1461		622		1574	
Starvation Cap Reductn		0	0	0		0	0		0		0	
Spillback Cap Reductn		0	0	0		0	0		0		0	
Storage Cap Reductn		0	0	0		0	0		0		0	
Reduced v/c Ratio		0.01	0.32	0.06		0.05	0.36		0.21		0.04	

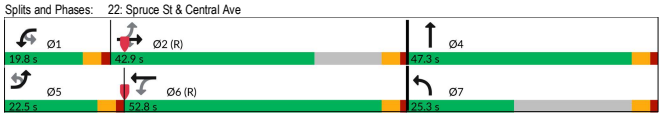
Intersection Summary	
Area Type:	Other
Cycle Length: 122.6	
Actuated Cycle Length: 122.6	
Offset: 22.5 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	

Lane Group	SBT	SBR
Detector 2 Extend (s)		
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Maximum Green (s)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		
Recall Mode		
Walk Time (s)		
Flash Don't Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay (s/veh)		
Queue Delay		
Total Delay (s/veh)		
LOS		
Approach Delay (s/veh)		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)	1	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 22: Spruce St & Central Ave



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	4	153	576	18	12	714	66	40	61	16	62	86
Future Volume (vph)	4	153	576	18	12	714	66	40	61	16	62	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		200	100		0	100		0	100	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97	1.00	1.00		1.00	1.00		1.00	0.99
Frt				0.850		0.987			0.969			0.919
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3555	0	1805	1835	0	1805	1730
Flt Permitted		0.284			0.425			0.404			0.704	
Satd. Flow (perm)	0	538	3610	1568	805	3555	0	766	1835	0	1337	1730
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				76		12			16			70
Link Speed (mph)			30			30			30			30
Link Distance (ft)			384			322			370			295
Travel Time (s)			8.7			7.3			8.4			6.7
Confl. Peds. (#/hr)	3	3		3	3		3	3		3	1	
Confl. Bikes (#/hr)				4			1			4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	159	600	19	13	744	69	42	64	17	65	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	600	19	13	813	0	42	81	0	65	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	2		1	2
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	101
Future Volume (vph)	101
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	6
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	105
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA
Protected Phases		5	2		1	6			4			8
Permitted Phases	5	2		2	6			4			8	
Detector Phase	5	5	2	2	1	6		4	4		8	8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (s)	22.0	22.0	33.8	33.8	11.2	33.8		30.0	30.0		30.0	30.0
Total Split (%)	25.6%	25.6%	39.4%	39.4%	13.1%	39.4%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	17.5	17.5	29.3	29.3	6.7	29.3		25.5	25.5		25.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0	4.0	4.0	1.5	4.0		3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max		None	None		None	None
Walk Time (s)			7.0	7.0				7.0	7.0		7.0	7.0
Flash Don't Walk (s)			15.0	15.0				30.0	30.0		26.0	26.0
Pedestrian Calls (#/hr)			0	0				0	0		0	0
Act Effct Green (s)		64.6	62.8	62.8	57.5	53.3		12.2	12.2		12.2	12.2
Actuated g/C Ratio		0.75	0.73	0.73	0.67	0.62		0.14	0.14		0.14	0.14
v/c Ratio		0.32	0.23	0.02	0.02	0.37		0.39	0.29		0.34	0.64
Control Delay (s/veh)		5.2	4.9	0.0	4.1	9.2		42.4	28.5		36.7	31.1
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.2	4.9	0.0	4.1	9.2		42.4	28.5		36.7	31.1
LOS		A	A	A	A	A		D	C		D	C
Approach Delay (s/veh)			4.8			9.1			33.2			32.5
Approach LOS			A			A			C			C
Queue Length 50th (ft)		18	38	0	1	97		21	32		32	64
Queue Length 95th (ft)		46	107	0	7	173		50	67		65	123
Internal Link Dist (ft)			304			242			290			215
Turn Bay Length (ft)		200		200	100			100			100	
Base Capacity (vph)		663	2640	1167	641	2213		227	556		397	563
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.23	0.02	0.02	0.37		0.19	0.15		0.16	0.35

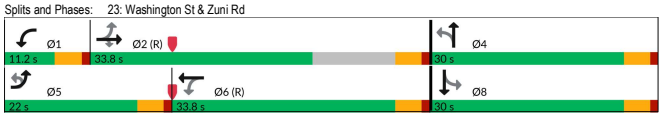
Intersection Summary
Area Type: Other
Cycle Length: 85.8
Actuated Cycle Length: 85.8
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Signal Delay (s/veh): 12.0	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Washington St & Zuni Rd

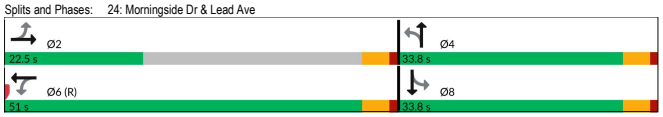


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	428	6	5	428	6	5	10	6	30	17	30
Future Volume (vph)	7	428	6	5	428	6	5	10	6	30	17	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				1.00	1.00			0.99			0.99	
Frt		0.998			0.998			0.961			0.948	
Flt Protected		0.999		0.950				0.988			0.981	
Satd. Flow (prot)	0	1894	0	1805	1896	0	0	1793	0	0	1748	0
Flt Permitted		0.994		0.451				0.962			0.910	
Satd. Flow (perm)	0	1885	0	856	1896	0	0	1745	0	0	1617	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1			6			31	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		95			612			60			347	
Travel Time (s)		2.2			13.9			1.4			7.9	
Confl. Peds. (#/hr)				1		1				3		3
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	446	6	5	446	6	5	10	6	31	18	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	459	0	5	452	0	0	21	0	0	80	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		51.0	51.0		33.8	33.8		33.8	33.8	
Total Split (%)	26.5%	26.5%		60.1%	60.1%		39.9%	39.9%		39.9%	39.9%	
Maximum Green (s)	18.0	18.0		46.5	46.5		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.5		4.5	4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		46.5		46.5	46.5			29.3			29.3	
Actuated g/C Ratio		0.55		0.55	0.55			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.44		0.01	0.43			0.03			0.14	
Control Delay (s/veh)		13.1		8.8	13.0			15.2			13.5	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		13.1		8.8	13.0			15.2			13.5	
LOS		B		A	B			B			B	
Approach Delay (s/veh)		13.1			12.9			15.2			13.5	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		136		1	133			5			17	
Queue Length 95th (ft)		207		6	203			20			47	
Internal Link Dist (ft)		15			532			1			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1034		469	1040			606			578	
Starvation Cap Reductn		0		0	0			0			0	
Spillback Cap Reductn		0		0	0			0			0	
Storage Cap Reductn		0		0	0			0			0	
Reduced v/c Ratio		0.44		0.01	0.43			0.03			0.14	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84.8			
Actuated Cycle Length: 84.8			
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 13.1		Intersection LOS: B	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Morningside Dr & Lead Ave



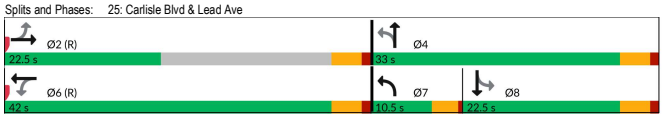
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	412	28	29	412	22	78	278	78	26	185	27
Future Volume (vph)	22	412	28	29	412	22	78	278	78	26	185	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	140		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						1.00	
Frt		0.992			0.994			0.967			0.985	
Flt Protected		0.998			0.997		0.950				0.995	
Satd. Flow (prot)	0	1879	0	0	1881	0	1805	1828	0	0	1857	0
Flt Permitted		0.970			0.958		0.331				0.924	
Satd. Flow (perm)	0	1826	0	0	1807	0	629	1828	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			5			22			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1128			1020			678			906	
Travel Time (s)		25.6			23.2			15.4			20.6	
Confl. Peds. (#/hr)	1		1							1		1
Confl. Bikes (#/hr)						1			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	23	429	29	30	429	23	81	290	81	27	193	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	481	0	0	482	0	81	371	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		3.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (s)	22.5	22.5		42.0	42.0		10.5	33.0		22.5	22.5	
Total Split (%)	30.0%	30.0%		56.0%	56.0%		14.0%	44.0%		30.0%	30.0%	
Maximum Green (s)	18.0	18.0		37.5	37.5		7.0	28.5		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5			4.5		3.5	4.5			4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		1.5	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0			10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		43.2			43.2		23.8	22.8			14.8	
Actuated g/C Ratio		0.58			0.58		0.32	0.30			0.20	
v/c Ratio		0.46			0.46		0.28	0.65			0.72	
Control Delay (s/veh)		12.2			12.4		20.1	28.8			39.1	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay (s/veh)		12.2			12.4		20.1	28.8			39.1	
LOS		B			B		C	C			D	
Approach Delay (s/veh)		12.2			12.4			27.3			39.1	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)		124			126		20	96			105	
Queue Length 95th (ft)		223			225		m35	149			171	
Internal Link Dist (ft)		1048			940			598			826	
Turn Bay Length (ft)							140					
Base Capacity (vph)		1053			1042		309	708			420	
Starvation Cap Reductn		0			0		0	0			0	
Spillback Cap Reductn		0			0		0	0			0	
Storage Cap Reductn		0			0		0	0			0	
Reduced v/c Ratio		0.46			0.46		0.26	0.52			0.59	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 20.4 Intersection LOS: C
Intersection Capacity Utilization 74.3% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Carlisle Blvd & Lead Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	335	63	64	334	38	39	357	39	11	219	11
Future Volume (vph)	38	335	63	64	334	38	39	357	39	11	219	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	125		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00				
Frt		0.980			0.988			0.988			0.993	
Flt Protected		0.996			0.993			0.996		0.950		
Satd. Flow (prot)	0	1848	0	0	1860	0	0	1866	0	1805	1887	0
Flt Permitted		0.939			0.886			0.952		0.308		
Satd. Flow (perm)	0	1742	0	0	1660	0	0	1784	0	585	1887	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			9			8			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1502			1364			656			678	
Travel Time (s)		34.1			31.0			14.9			15.4	
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			2						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	349	66	67	348	40	41	372	41	11	228	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	455	0	0	455	0	0	454	0	11	239	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	10		10	10	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	10		10	10	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												

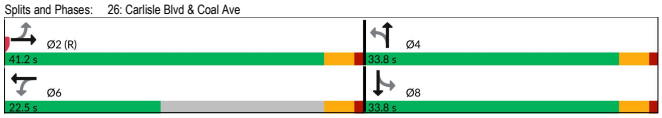
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		43.0			43.0			23.0		23.0	23.0	
Actuated g/C Ratio		0.57			0.57			0.31		0.31	0.31	
v/c Ratio		0.45			0.48			0.82		0.06	0.41	
Control Delay (s/veh)		11.9			12.6			36.1		34.0	40.5	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay (s/veh)		11.9			12.6			36.1		34.0	40.5	
LOS		B			B			D		C	D	
Approach Delay (s/veh)		11.9			12.6			36.1			40.2	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)		108			113			189		5	119	
Queue Length 95th (ft)		214			223			263		m8	167	
Internal Link Dist (ft)		1422			1284			576			598	
Turn Bay Length (ft)										125		
Base Capacity (vph)		1006			955			701		228	739	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.45			0.48			0.65		0.05	0.32	

Intersection Summary
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82

Intersection Signal Delay (s/veh): 23.3	Intersection LOS: C
Intersection Capacity Utilization 83.5%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 26: Carlisle Blvd & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	373	4	4	374	7	4	7	5	5	10	6
Future Volume (vph)	6	373	4	4	374	7	4	7	5	5	10	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.998			0.958			0.961	
Flt Protected		0.999						0.988			0.988	
Satd. Flow (prot)	0	1896	0	0	1896	0	0	1798	0	0	1804	0
Flt Permitted		0.999						0.988			0.988	
Satd. Flow (perm)	0	1896	0	0	1896	0	0	1798	0	0	1804	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1364			656			675			514	
Travel Time (s)		31.0			14.9			15.3			11.7	
Confl. Bikes (#/hr)			3						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	389	4	4	390	7	4	7	5	5	10	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	0	401	0	0	16	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

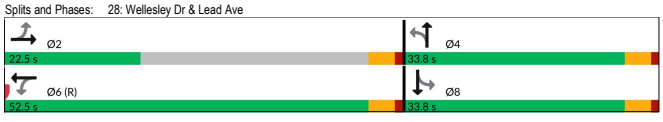
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	438	5	5	439	5	6	17	7	13	7	14
Future Volume (vph)	6	438	5	5	439	5	6	17	7	13	7	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00			0.99			0.99	
Frt		0.999			0.999			0.970			0.944	
Flt Protected		0.999			0.999			0.990			0.981	
Satd. Flow (prot)	0	1896	0	0	1896	0	0	1813	0	0	1739	0
Flt Permitted		0.995			0.996			0.971			0.929	
Satd. Flow (perm)	0	1889	0	0	1890	0	0	1777	0	0	1644	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1			7			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1480			1128			236			850	
Travel Time (s)		33.6			25.6			5.4			19.3	
Confl. Peds. (#/hr)				1		1	2		2	2		2
Confl. Bikes (#/hr)						7			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	456	5	5	457	5	6	18	7	14	7	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	467	0	0	467	0	0	31	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.44			0.44			0.05			0.06	
Control Delay (s/veh)		13.0			12.9			16.3			13.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		13.0			12.9			16.3			13.6	
LOS		B			B			B			B	
Approach Delay (s/veh)		13.0			12.9			16.3			13.6	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		139			139			9			8	
Queue Length 95th (ft)		210			210			27			28	
Internal Link Dist (ft)		1400			1048			156			770	
Turn Bay Length (ft)												
Base Capacity (vph)		1051			1051			607			568	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.44			0.44			0.05			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 13.1		Intersection LOS: B	
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Wellesley Dr & Lead Ave

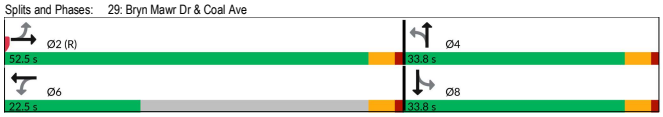


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	433	5	5	433	5	0	5	0	2	6	3
Future Volume (vph)	6	433	5	5	433	5	0	5	0	2	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.99	
Frt		0.999			0.999						0.963	
Flt Protected		0.999			0.999						0.991	
Satd. Flow (prot)	0	1896	0	0	1896	0	0	1900	0	0	1798	0
Flt Permitted		0.995			0.996						0.982	
Satd. Flow (perm)	0	1888	0	0	1890	0	0	1900	0	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			1						3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1119			1502			239			286	
Travel Time (s)		25.4			34.1			5.4			6.5	
Confl. Peds. (#/hr)				3		3	1		1	4		4
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	451	5	5	451	5	0	5	0	2	6	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	462	0	0	461	0	0	5	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	52.5	52.5		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	60.8%	60.8%		26.1%	26.1%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	48.0	48.0		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.44			0.44			0.01			0.02	
Control Delay (s/veh)		12.9			12.9			19.0			16.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		12.9			12.9			19.0			16.7	
LOS		B			B			B			B	
Approach Delay (s/veh)		12.9			12.9			19.0			16.7	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		137			137			2			3	
Queue Length 95th (ft)		207			207			9			14	
Internal Link Dist (ft)		1039			1422			159			206	
Turn Bay Length (ft)												
Base Capacity (vph)		1050			1051			645			605	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.44			0.44			0.01			0.02	

Intersection Summary			
Area Type:	Other		
Cycle Length: 86.3			
Actuated Cycle Length: 86.3			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 48.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Bryn Mawr Dr & Coal Ave

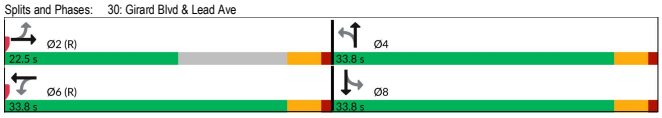


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	463	21	20	462	21	24	208	24	38	175	38
Future Volume (vph)	20	463	21	20	462	21	24	208	24	38	175	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00			1.00	
Frt		0.994			0.994			0.987			0.979	
Flt Protected		0.998			0.998			0.995			0.992	
Satd. Flow (prot)	0	1883	0	0	1883	0	0	1862	0	0	1839	0
Flt Permitted		0.975			0.975			0.943			0.866	
Satd. Flow (perm)	0	1840	0	0	1840	0	0	1764	0	0	1605	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			4			10			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1133			1480			669			1373	
Travel Time (s)		25.8			33.6			15.2			31.2	
Confl. Peds. (#/hr)	1		1				1		1	1		1
Confl. Bikes (#/hr)			2			5			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	21	482	22	21	481	22	25	217	25	40	182	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	525	0	0	524	0	0	267	0	0	262	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		33.8	33.8		33.8	33.8		33.8	33.8	
Total Split (%)	33.3%	33.3%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		29.3	29.3		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		44.2			44.2			14.4			14.4	
Actuated g/C Ratio		0.65			0.65			0.21			0.21	
v/c Ratio		0.44			0.44			0.70			0.74	
Control Delay (s/veh)		8.0			8.0			32.7			35.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		8.0			8.0			32.7			35.2	
LOS		A			A			C			D	
Approach Delay (s/veh)		8.0			8.0			32.7			35.2	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)		88			88			99			95	
Queue Length 95th (ft)		193			192			152			149	
Internal Link Dist (ft)		1053			1400			589			1293	
Turn Bay Length (ft)												
Base Capacity (vph)		1204			1204			770			705	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.44			0.44			0.35			0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.6			
Actuated Cycle Length: 67.6			
Offset: 33.8 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 16.7		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 30: Girard Blvd & Lead Ave

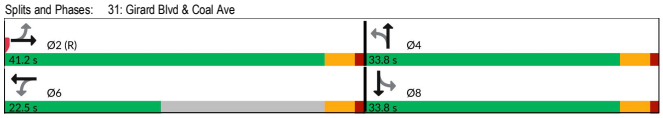


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	426	27	28	426	41	22	175	22	22	170	22
Future Volume (vph)	40	426	27	28	426	41	22	175	22	22	170	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00			1.00	
Frt		0.993			0.989			0.986			0.986	
Flt Protected		0.996			0.997			0.995			0.995	
Satd. Flow (prot)	0	1876	0	0	1873	0	0	1860	0	0	1859	0
Flt Permitted		0.938			0.962			0.933			0.927	
Satd. Flow (perm)	0	1767	0	0	1808	0	0	1744	0	0	1732	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			9			9			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1499			1119			324			669	
Travel Time (s)		34.1			25.4			7.4			15.2	
Confl. Peds. (#/hr)	1		1							2		2
Confl. Bikes (#/hr)			5						2			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	42	444	28	29	444	43	23	182	23	23	177	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	514	0	0	516	0	0	228	0	0	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		52.3			52.3			13.7			13.7	
Actuated g/C Ratio		0.70			0.70			0.18			0.18	
v/c Ratio		0.42			0.41			0.70			0.69	
Control Delay (s/veh)		19.3			6.7			38.5			38.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		19.3			6.7			38.5			38.0	
LOS		B			A			D			D	
Approach Delay (s/veh)		19.3			6.7			38.5			38.0	
Approach LOS		B			A			D			D	
Queue Length 50th (ft)		225			82			96			94	
Queue Length 95th (ft)		321			175			152			149	
Internal Link Dist (ft)		1419			1039			244			589	
Turn Bay Length (ft)												
Base Capacity (vph)		1233			1263			686			682	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.42			0.41			0.33			0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 20.7		Intersection LOS: C	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 31: Girard Blvd & Coal Ave



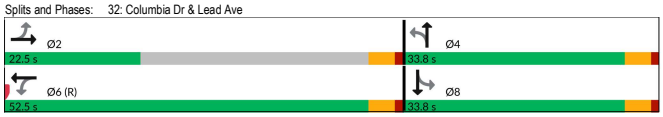
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	8	477	16	16	477	8	6	23	6	10	15	9
Future Volume (vph)	8	477	16	16	477	8	6	23	6	10	15	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.996			0.998			0.977			0.965	
Flt Protected		0.999			0.998			0.992			0.986	
Satd. Flow (prot)	0	1889	0	0	1891	0	0	1834	0	0	1791	0
Flt Permitted		0.993			0.980			0.975			0.951	
Satd. Flow (perm)	0	1877	0	0	1857	0	0	1801	0	0	1721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			1			6			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1197			1133			216			239	
Travel Time (s)		27.2			25.8			4.9			5.4	
Confl. Peds. (#/hr)	3		3	4		4	1		1	5		5
Confl. Bikes (#/hr)						7			3			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	497	17	17	497	8	6	24	6	10	16	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	522	0	0	522	0	0	36	0	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		52.5	52.5		33.8	33.8		33.8	33.8	
Total Split (%)	26.1%	26.1%		60.8%	60.8%		39.2%	39.2%		39.2%	39.2%	
Maximum Green (s)	18.0	18.0		48.0	48.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		48.0			48.0			29.3			29.3	
Actuated g/C Ratio		0.56			0.56			0.34			0.34	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.50			0.51			0.06			0.06	
Control Delay (s/veh)		13.8			14.0			17.2			15.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		13.8			14.0			17.2			15.9	
LOS		B			B			B			B	
Approach Delay (s/veh)		13.8			14.0			17.2			15.9	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		161			163			11			9	
Queue Length 95th (ft)		243			245			31			29	
Internal Link Dist (ft)		1117			1053			136			159	
Turn Bay Length (ft)												
Base Capacity (vph)		1045			1033			615			590	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.50			0.51			0.06			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 86.3
Actuated Cycle Length: 86.3
Offset: 22.5 (26%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.51
Intersection Signal Delay (s/veh): 14.0 Intersection LOS: B
Intersection Capacity Utilization 56.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 32: Columbia Dr & Lead Ave



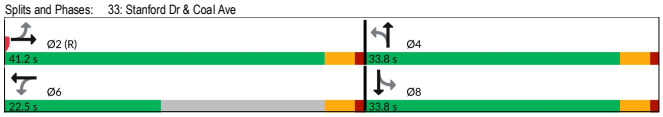
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	12	459	3	3	460	12	3	6	4	7	6	6
Future Volume (vph)	12	459	3	3	460	12	3	6	4	7	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.999			0.996			0.958			0.957	
Flt Protected		0.999						0.989			0.982	
Satd. Flow (prot)	0	1896	0	0	1891	0	0	1783	0	0	1767	0
Flt Permitted		0.986			0.998			0.975			0.952	
Satd. Flow (perm)	0	1871	0	0	1888	0	0	1756	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			3			4			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		755			1499			346			306	
Travel Time (s)		17.2			34.1			7.9			7.0	
Confl. Peds. (#/hr)	2		2				3		3	5		5
Confl. Bikes (#/hr)			7			1			4			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	478	3	3	479	13	3	6	4	7	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	494	0	0	495	0	0	13	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	54.9%	54.9%		30.0%	30.0%		45.1%	45.1%		45.1%	45.1%	
Maximum Green (s)	36.7	36.7		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		36.7			36.7			29.3			29.3	
Actuated g/C Ratio		0.49			0.49			0.39			0.39	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.54			0.54			0.02			0.03	
Control Delay (s/veh)		16.0			14.6			12.2			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		16.0			14.6			12.2			11.7	
LOS		B			B			B			B	
Approach Delay (s/veh)		16.0			14.6			12.2			11.7	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		151			113			3			4	
Queue Length 95th (ft)		235			204			13			16	
Internal Link Dist (ft)		675			1419			266			226	
Turn Bay Length (ft)												
Base Capacity (vph)		916			925			688			670	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.54			0.54			0.02			0.03	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.54
Intersection Signal Delay (s/veh): 15.2 Intersection LOS: B
Intersection Capacity Utilization 54.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 33: Stanford Dr & Coal Ave



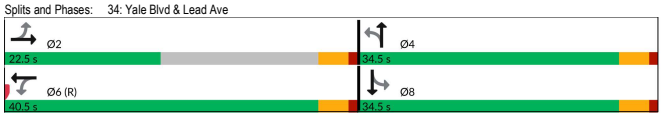
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	414	102	102	414	13	59	188	58	20	177	19
Future Volume (vph)	13	414	102	102	414	13	59	188	58	20	177	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	70		0	120		0	0		25
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.99	1.00		1.00	0.99			1.00	0.98
Frt		0.974			0.995			0.965				0.850
Flt Protected		0.999		0.950			0.950				0.995	
Satd. Flow (prot)	0	1832	0	1805	1887	0	1805	1823	0	0	1890	1615
Flt Permitted		0.988		0.453			0.497				0.899	
Satd. Flow (perm)	0	1811	0	853	1887	0	941	1823	0	0	1708	1581
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			3			24				87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			331			894			1232	
Travel Time (s)		5.4			7.5			20.3			28.0	
Confl. Peds. (#/hr)	13		13	13		13	2		2	2		2
Confl. Bikes (#/hr)			1			7						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	431	106	106	431	14	61	196	60	21	184	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	551	0	106	445	0	61	256	0	0	205	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	0	0
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	0	0
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		Free
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (s)	22.5	22.5		40.5	40.5		34.5	34.5		34.5	34.5	
Total Split (%)	30.0%	30.0%		54.0%	54.0%		46.0%	46.0%		46.0%	46.0%	
Maximum Green (s)	18.0	18.0		36.0	36.0		30.0	30.0		30.0	30.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		50.8		50.8	50.8		15.2	15.2			15.2	75.0
Actuated g/C Ratio		0.68		0.68	0.68		0.20	0.20			0.20	1.00
v/c Ratio		0.45		0.18	0.35		0.32	0.66			0.59	0.01
Control Delay (s/veh)		7.7		6.7	6.9		28.2	32.4			33.3	0.0
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)		7.7		6.7	6.9		28.2	32.4			33.3	0.0
LOS		A		A	A		C	C			C	A
Approach Delay (s/veh)		7.7			6.8			31.6			30.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		94		15	73		24	100			87	0
Queue Length 95th (ft)		206		45	157		52	154			135	0
Internal Link Dist (ft)		158			251			814			1152	
Turn Bay Length (ft)				70			120					25
Base Capacity (vph)		1233		577	1278		376	743			683	1581
Starvation Cap Reductn		0		0	0		0	0			0	0
Spillback Cap Reductn		0		0	0		0	0			0	0
Storage Cap Reductn		0		0	0		0	0			0	0
Reduced v/c Ratio		0.45		0.18	0.35		0.16	0.34			0.30	0.01

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	

Intersection Signal Delay (s/veh): 15.1		Intersection LOS: B	
Intersection Capacity Utilization 90.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 34: Yale Blvd & Lead Ave



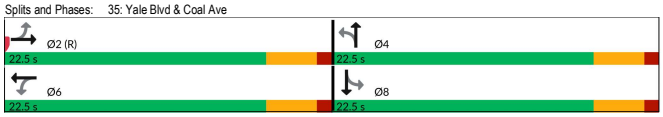
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	411	33	34	411	23	97	281	97	19	323	19
Future Volume (vph)	24	411	33	34	411	23	97	281	97	19	323	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		130	0		0	0		0	90		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00			0.99			1.00	
Frt		0.989			0.993			0.972			0.992	
Flt Protected	0.950				0.996			0.990		0.950		
Satd. Flow (prot)	1805	1875	0	0	1876	0	0	1820	0	1805	1881	0
Flt Permitted	0.443				0.949			0.797		0.419		
Satd. Flow (perm)	840	1875	0	0	1787	0	0	1464	0	792	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			7			34			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		587			390			545			894	
Travel Time (s)		13.3			8.9			12.4			20.3	
Confl. Peds. (#/hr)	3		3	10		10	2		2	9		9
Confl. Bikes (#/hr)			3			2			1			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	428	34	35	428	24	101	293	101	20	336	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	462	0	0	487	0	0	495	0	20	356	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	19.6	19.6			19.6			16.4		16.4	16.4	
Actuated g/C Ratio	0.44	0.44			0.44			0.36		0.36	0.36	
v/c Ratio	0.07	0.56			0.62			0.89		0.07	0.51	
Control Delay (s/veh)	9.1	13.3			15.2			33.8		9.2	13.4	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay (s/veh)	9.1	13.3			15.2			33.8		9.2	13.4	
LOS	A	B			B			C		A	B	
Approach Delay (s/veh)		13.1			15.2			33.8			13.2	
Approach LOS		B			B			C			B	
Queue Length 50th (ft)	4	87			96			100		3	62	
Queue Length 95th (ft)	14	160			#185			#246		13	118	
Internal Link Dist (ft)		507			310			465			814	
Turn Bay Length (ft)	130									90		
Base Capacity (vph)	365	821			781			606		316	757	
Starvation Cap Reductn	0	0			0			0		0	0	
Spillback Cap Reductn	0	0			0			0		0	0	
Storage Cap Reductn	0	0			0			0		0	0	
Reduced v/c Ratio	0.07	0.56			0.62			0.82		0.06	0.47	

Intersection Summary
Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 19.2 Intersection LOS: B
Intersection Capacity Utilization 106.9% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 35: Yale Blvd & Coal Ave

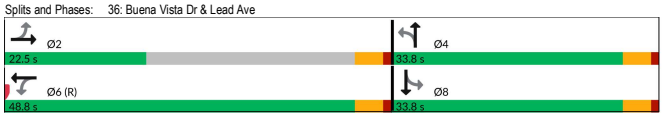


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	433	9	8	434	9	39	22	39	6	8	5
Future Volume (vph)	8	433	9	8	434	9	39	22	39	6	8	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.997			0.997			0.947			0.964	
Flt Protected		0.999			0.999			0.981			0.984	
Satd. Flow (prot)	0	1891	0	0	1891	0	0	1747	0	0	1790	0
Flt Permitted		0.993			0.993			0.902			0.946	
Satd. Flow (perm)	0	1879	0	0	1879	0	0	1606	0	0	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2			41			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		998			360			1101			221	
Travel Time (s)		22.7			8.2			25.0			5.0	
Confl. Peds. (#/hr)	9		9	6		6				2		2
Confl. Bikes (#/hr)						8			6			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	451	9	8	452	9	41	23	41	6	8	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	468	0	0	469	0	0	105	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	22.5	22.5		41.2	41.2		33.8	33.8		33.8	33.8	
Total Split (s)	22.5	22.5		48.8	48.8		33.8	33.8		33.8	33.8	
Total Split (%)	27.2%	27.2%		59.1%	59.1%		40.9%	40.9%		40.9%	40.9%	
Maximum Green (s)	18.0	18.0		44.3	44.3		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		44.3			44.3			29.3			29.3	
Actuated g/C Ratio		0.54			0.54			0.35			0.35	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.46			0.47			0.18			0.03	
Control Delay (s/veh)		13.7			13.7			12.7			14.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		13.7			13.7			12.7			14.7	
LOS		B			B			B			B	
Approach Delay (s/veh)		13.7			13.7			12.7			14.7	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		139			139			22			5	
Queue Length 95th (ft)		213			214			56			18	
Internal Link Dist (ft)		918			280			1021			141	
Turn Bay Length (ft)												
Base Capacity (vph)		1008			1008			596			612	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.46			0.47			0.18			0.03	

Intersection Summary
Area Type: Other
Cycle Length: 82.6
Actuated Cycle Length: 82.6
Offset: 22.5 (27%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.47
Intersection Signal Delay (s/veh): 13.6 Intersection LOS: B
Intersection Capacity Utilization 49.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 36: Buena Vista Dr & Lead Ave

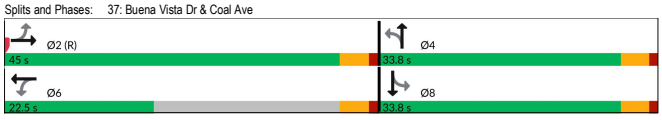


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	425	21	22	425	17	17	62	17	8	18	9
Future Volume (vph)	18	425	21	22	425	17	17	62	17	8	18	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.994			0.995			0.976			0.966	
Flt Protected		0.998			0.998			0.991			0.989	
Satd. Flow (prot)	0	1882	0	0	1884	0	0	1827	0	0	1796	0
Flt Permitted		0.978			0.972			0.931			0.934	
Satd. Flow (perm)	0	1844	0	0	1835	0	0	1715	0	0	1690	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			4			16			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			587			313			1101	
Travel Time (s)		14.2			13.3			7.1			25.0	
Confl. Peds. (#/hr)	6		6	7		7	3		3	8		8
Confl. Bikes (#/hr)			6						5			4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	443	22	23	443	18	18	65	18	8	19	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	484	0	0	484	0	0	101	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	41.2	41.2		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (s)	45.0	45.0		22.5	22.5		33.8	33.8		33.8	33.8	
Total Split (%)	57.1%	57.1%		28.6%	28.6%		42.9%	42.9%		42.9%	42.9%	
Maximum Green (s)	40.5	40.5		18.0	18.0		29.3	29.3		29.3	29.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		63.9			63.9			9.3			9.3	
Actuated g/C Ratio		0.81			0.81			0.12			0.12	
v/c Ratio		0.32			0.33			0.47			0.17	
Control Delay (s/veh)		3.5			3.5			34.4			26.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		3.5			3.5			34.4			26.7	
LOS		A			A			C			C	
Approach Delay (s/veh)		3.5			3.5			34.4			26.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		51			51			40			12	
Queue Length 95th (ft)		107			107			83			37	
Internal Link Dist (ft)		546			507			233			1021	
Turn Bay Length (ft)												
Base Capacity (vph)		1497			1489			647			634	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.33			0.16			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 78.8			
Actuated Cycle Length: 78.8			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 47.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Buena Vista Dr & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	411	26	27	822	48	1	46	322	47	50	436
Future Volume (vph)	48	411	26	27	822	48	1	46	322	47	50	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	7		0	0		130		125		0	100	
Storage Lanes	0		0	0		1		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor		1.00			1.00	0.98			1.00			
Frt		0.993				0.850			0.981			0.985
Flt Protected		0.995			0.998			0.950			0.950	
Satd. Flow (prot)	0	1876	0	0	1896	1615	0	1805	5074	0	1805	5109
Flt Permitted		0.296			0.977			0.383			0.516	
Satd. Flow (perm)	0	558	0	0	1856	1589	0	728	5074	0	980	5109
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		5				80			46			25
Link Speed (mph)		30			30				30			40
Link Distance (ft)		2138			998				770			1118
Travel Time (s)		48.6			22.7				17.5			19.1
Confl. Peds. (#/hr)	2		2	1		1						
Confl. Bikes (#/hr)			1			6				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	50	428	27	28	856	50	1	48	335	49	52	454
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	505	0	0	884	50	0	49	384	0	52	506
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2	1	1	1	2		1	2
Detector Template	Left	Thru		Left	Thru	Right	Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100	20	20	20	100		20	100
Trailing Detector (ft)	0	0		0	0	0	0	0	0		0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0		0	0
Detector 1 Size(ft)	20	6		20	6	20	20	20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94				94			94
Detector 2 Size(ft)		6			6				6			6
Detector 2 Type		Cl+Ex			Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	50
Future Volume (vph)	50
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	52
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0			0.0				0.0			0.0
Turn Type	Perm	NA		Perm	NA	Perm	custom	pm+pt	NA		Perm	NA
Protected Phases		2			6			7	4			8
Permitted Phases	2			6		6	7	4			8	
Detector Phase	2	2		6	6	6	7	7	4		8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0	8.0	3.0	3.0	8.0		8.0	8.0
Minimum Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	15.0	37.5		22.5	22.5
Total Split (s)	22.5	22.5		37.5	37.5	37.5	15.0	15.0	37.5		22.5	22.5
Total Split (%)	30.0%	30.0%		50.0%	50.0%	50.0%	20.0%	20.0%	50.0%		30.0%	30.0%
Maximum Green (s)	18.0	18.0		32.0	32.0	32.0	11.0	11.0	33.0		18.0	18.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.0	3.0	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0		2.0	2.0	2.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5			5.5	5.5		4.0	4.5		4.5	4.5
Lead/Lag							Lead	Lead			Lag	Lag
Lead-Lag Optimize?							Yes	Yes			Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	1.5	3.0		3.0	3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	Max		Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0			7.0		7.0	7.0
Flash Don't Walk (s)	11.0	11.0		23.0	23.0	23.0			10.0		10.0	10.0
Pedestrian Calls (#/hr)	0	0		0	0	0			0		0	0
Act Effct Green (s)		33.0			32.0	32.0		33.5	33.0		27.1	27.1
Actuated g/C Ratio		0.44			0.43	0.43		0.45	0.44		0.36	0.36
v/c Ratio		2.04			1.12	0.07		0.12	0.17		0.15	0.27
Control Delay (s/veh)		498.6			93.3	1.8		12.6	11.4		20.0	17.6
Queue Delay		0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		498.6			93.3	1.8		12.6	11.4		20.0	17.6
LOS		F			F	A		B	B		C	B
Approach Delay (s/veh)		498.6			88.4				11.5			17.8
Approach LOS		F			F				B			B
Queue Length 50th (ft)		~383			~482	0		12	33		17	61
Queue Length 95th (ft)		#454			#696	10		31	50		45	90
Internal Link Dist (ft)		2058			918				690			1038
Turn Bay Length (ft)						130		125			100	
Base Capacity (vph)		248			791	723		483	2258		354	1861
Starvation Cap Reductn		0			0	0		0	0		0	0
Spillback Cap Reductn		0			0	0		0	0		0	0
Storage Cap Reductn		0			0	0		0	0		0	0
Reduced v/c Ratio		2.04			1.12	0.07		0.10	0.17		0.15	0.27

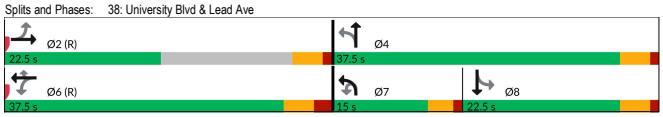
Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.04	

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Signal Delay (s/veh): 143.7	Intersection LOS: F
Intersection Capacity Utilization 88.8%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 38: University Blvd & Lead Ave



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	38	365	16	16	365	38	57	324	57	59	349	60
Future Volume (vph)	38	365	16	16	365	38	57	324	57	59	349	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		120	0		100	80		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Ped Bike Factor		1.00			1.00		0.95		0.96	1.00	1.00	
Frt		0.995				0.850			0.850		0.978	
Flt Protected		0.995			0.998		0.950			0.950		
Satd. Flow (prot)	0	1880	0	0	1896	1615	1805	3610	1615	1805	5056	0
Flt Permitted		0.528			0.947		0.494			0.430		
Satd. Flow (perm)	0	997	0	0	1799	1615	894	3610	1554	816	5056	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				57			99		63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		165			531			1756			196	
Travel Time (s)		3.8			12.1			39.9			4.5	
Confl. Peds. (#/hr)	3		3	1		1	33		33	1		1
Confl. Bikes (#/hr)			1			4			4			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	380	17	17	380	40	59	338	59	61	364	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	437	0	0	397	40	59	338	59	61	427	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		30	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		4	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		26	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

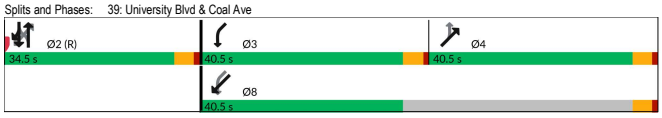
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA	Free	pm+pt	NA	
Protected Phases		2			2	2		4		3	8	
Permitted Phases	2			2			4		Free	8		
Detector Phase	2	2		2	2	2	4	4		3	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		8.0	8.0	
Minimum Split (s)	34.5	34.5		34.5	34.5	34.5	40.5	40.5		40.5	40.5	
Total Split (s)	34.5	34.5		34.5	34.5	34.5	40.5	40.5		40.5	40.5	
Total Split (%)	29.9%	29.9%		29.9%	29.9%	29.9%	35.1%	35.1%		35.1%	35.1%	
Maximum Green (s)	30.0	30.0		30.0	30.0	30.0	36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	32.0	32.0		32.0	32.0	32.0	15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)		30.0			30.0	30.0	36.0	36.0	115.5	76.5	76.5	
Actuated g/C Ratio		0.26			0.26	0.26	0.31	0.31	1.00	0.66	0.66	
v/c Ratio		1.68			0.85	0.09	0.21	0.30	0.04	0.07	0.13	
Control Delay (s/veh)		352.0			58.8	5.1	31.9	31.1	0.1	7.1	6.2	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		352.0			58.8	5.1	31.9	31.1	0.1	7.1	6.2	
LOS		F			E	A	C	C	A	A	A	
Approach Delay (s/veh)		352.0			53.9			27.2			6.3	
Approach LOS		F			D			C			A	
Queue Length 50th (ft)		~479			281	0	32	100	0	14	32	
Queue Length 95th (ft)		#682			#447	17	69	140	0	29	45	
Internal Link Dist (ft)		85			451			1676			116	
Turn Bay Length (ft)						120			100	80		
Base Capacity (vph)		260			467	461	278	1125	1554	848	3370	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		1.68			0.85	0.09	0.21	0.30	0.04	0.07	0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 115.5	
Actuated Cycle Length: 115.5	
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.68	

Intersection Signal Delay (s/veh): 106.1	Intersection LOS: F
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 39: University Blvd & Coal Ave



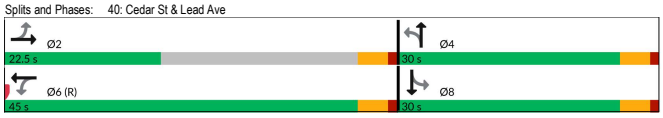
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	520	10	9	521	9	3	25	3	100	25	99
Future Volume (vph)	9	520	10	9	521	9	3	25	3	100	25	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.998			0.998			0.987			0.940	
Flt Protected		0.999			0.999			0.995			0.978	
Satd. Flow (prot)	0	1893	0	0	1894	0	0	1862	0	0	1735	0
Flt Permitted		0.992			0.992			0.978			0.841	
Satd. Flow (perm)	0	1880	0	0	1880	0	0	1830	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			2			3			58	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			2138			144			153	
Travel Time (s)		8.1			48.6			3.3			3.5	
Confl. Peds. (#/hr)	3		3				1		1	1		1
Confl. Bikes (#/hr)						9			2			2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	542	10	9	543	9	3	26	3	104	26	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	561	0	0	561	0	0	32	0	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (s)	22.5	22.5		45.0	45.0		30.0	30.0		30.0	30.0	
Total Split (%)	30.0%	30.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	18.0	18.0		40.5	40.5		25.5	25.5		25.5	25.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		52.2			52.2			13.8			13.8	
Actuated g/C Ratio		0.70			0.70			0.18			0.18	
v/c Ratio		0.43			0.43			0.09			0.73	
Control Delay (s/veh)		7.0			10.9			21.7			34.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		7.0			10.9			21.7			34.0	
LOS		A			B			C			C	
Approach Delay (s/veh)		7.0			10.9			21.7			34.0	
Approach LOS		A			B			C			C	
Queue Length 50th (ft)		91			153			11			77	
Queue Length 95th (ft)		202			m147			29			135	
Internal Link Dist (ft)		275			2058			64			73	
Turn Bay Length (ft)												
Base Capacity (vph)		1309			1309			624			545	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.43			0.43			0.05			0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 22.5 (30%), Referenced to phase 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 13.5		Intersection LOS: B	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Cedar St & Lead Ave

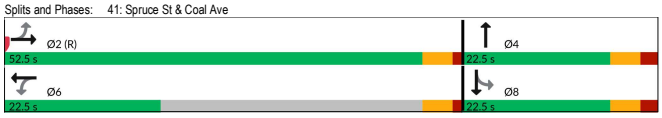


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	410	3	3	411	6	0	2	4	17	12	0
Future Volume (vph)	5	410	3	3	411	6	0	2	4	17	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.97			1.00	
Frt		0.999			0.998			0.910				
Flt Protected		0.999									0.972	
Satd. Flow (prot)	0	1896	0	0	1896	0	0	1685	0	0	1847	0
Flt Permitted		0.997			0.998						0.988	
Satd. Flow (perm)	0	1892	0	0	1892	0	0	1685	0	0	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			2			4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			1032			207			168	
Travel Time (s)		24.6			23.5			4.7			3.8	
Confl. Peds. (#/hr)	5		5	2		2	6		6	2		2
Confl. Bikes (#/hr)			6						3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	427	3	3	428	6	0	2	4	18	13	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	435	0	0	437	0	0	6	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2			0		1	0	
Detector Template	Left	Thru		Left	Thru			Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100			0		20	0	
Trailing Detector (ft)	0	0		0	0			0		0	0	
Detector 1 Position(ft)	0	0		0	0			0		0	0	
Detector 1 Size(ft)	20	6		20	6			6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6						8		
Detector Phase	2	2		6	6			4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0			8.0		8.0	8.0	
Minimum Split (s)	52.5	52.5		22.5	22.5			22.5		22.5	22.5	
Total Split (s)	52.5	52.5		22.5	22.5			22.5		22.5	22.5	
Total Split (%)	70.0%	70.0%		30.0%	30.0%			30.0%		30.0%	30.0%	
Maximum Green (s)	48.0	48.0		18.0	18.0			17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5			3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0			2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0			2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None			None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0			10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		67.8			67.8			8.0			8.0	
Actuated g/C Ratio		0.90			0.90			0.11			0.11	
v/c Ratio		0.25			0.26			0.03			0.16	
Control Delay (s/veh)		2.0			2.0			23.2			32.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		2.0			2.0			23.2			32.5	
LOS		A			A			C			C	
Approach Delay (s/veh)		2.0			2.0			23.2			32.5	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		0			0			1			13	
Queue Length 95th (ft)		74			74			12			38	
Internal Link Dist (ft)		1003			952			127			88	
Turn Bay Length (ft)												
Base Capacity (vph)		1710			1710			385			424	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.25			0.26			0.02			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 3.1		Intersection LOS: A	
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Spruce St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	328	338	0	0	338	328	37	555	37	0	0	0
Future Volume (vph)	328	338	0	0	338	328	37	555	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		200	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor						0.98		1.00				
Frt						0.850		0.991				
Flt Protected		0.976					0.950					
Satd. Flow (prot)	0	1854	0	0	3610	1615	1805	3573	0	0	0	0
Flt Permitted		0.665					0.950					
Satd. Flow (perm)	0	1264	0	0	3610	1585	1805	3573	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						143		15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		338			375			362			140	
Travel Time (s)		7.7			8.5			8.2			3.2	
Confl. Peds. (#/hr)										1		1
Confl. Bikes (#/hr)						14			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	342	352	0	0	352	342	39	578	39	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	694	0	0	352	342	39	617	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2				
Detector Template	Left	Thru			Thru	Right	Left	Thru				
Leading Detector (ft)	20	100			100	20	20	100				
Trailing Detector (ft)	0	0			0	0	0	0				
Detector 1 Position(ft)	0	0			0	0	0	0				
Detector 1 Size(ft)	20	6			6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		2			6			4				
Permitted Phases	2					6	4					
Detector Phase	2	2			6	6	4	4				
Switch Phase												
Minimum Initial (s)	5.0	5.0			8.0	8.0	8.0	8.0				
Minimum Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (s)	22.5	22.5			28.0	28.0	24.0	24.0				
Total Split (%)	43.3%	43.3%			53.8%	53.8%	46.2%	46.2%				
Maximum Green (s)	18.0	18.0			23.5	23.5	19.5	19.5				
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5				
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0				
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0				
Total Lost Time (s)		4.5			4.5	4.5	4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			2.0	2.0	2.0	2.0				
Recall Mode	C-Max	C-Max			C-Max	C-Max	None	None				
Walk Time (s)	7.0	7.0			7.0	7.0	7.0	7.0				
Flash Don't Walk (s)	11.0	11.0			10.0	10.0	11.0	11.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)		29.0			29.0	29.0	14.0	14.0				
Actuated g/C Ratio		0.56			0.56	0.56	0.27	0.27				
v/c Ratio		0.99			0.18	0.36	0.08	0.63				
Control Delay (s/veh)		49.1			6.8	5.7	12.7	18.8				
Queue Delay		0.0			0.0	0.0	0.0	0.0				
Total Delay (s/veh)		49.1			6.8	5.7	12.7	18.8				
LOS		D			A	A	B	B				
Approach Delay (s/veh)		49.1			6.3			18.4				
Approach LOS		D			A			B				
Queue Length 50th (ft)		182			24	27	9	84				
Queue Length 95th (ft)		#439			52	82	22	109				
Internal Link Dist (ft)		258			295			282			60	
Turn Bay Length (ft)						200						
Base Capacity (vph)		704			2010	946	676	1349				
Starvation Cap Reductn		0			0	0	0	0				
Spillback Cap Reductn		0			0	0	0	0				
Storage Cap Reductn		0			0	0	0	0				
Reduced v/c Ratio		0.99			0.18	0.36	0.06	0.46				

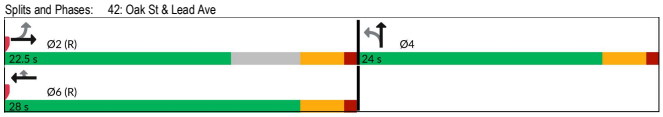
Intersection Summary

Area Type: Other
Cycle Length: 52
Actuated Cycle Length: 52
Offset: 24 (46%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 24.7	Intersection LOS: C
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: Oak St & Lead Ave



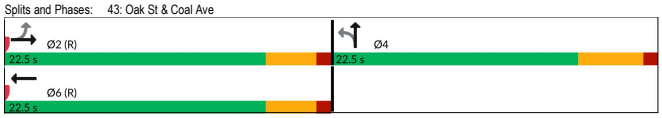
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	400	0	0	401	200	0	226	73	0	0	0
Future Volume (vph)	201	400	0	0	401	200	0	226	73	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		120	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.955			0.963				
Flt Protected	0.950											
Satd. Flow (prot)	1805	1900	0	0	1814	0	0	4995	0	0	0	0
Flt Permitted	0.322											
Satd. Flow (perm)	612	1900	0	0	1814	0	0	4995	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					66			76				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1083			176			362	
Travel Time (s)		8.0			24.6			4.0			8.2	
Confl. Bikes (#/hr)			11									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	209	417	0	0	418	208	0	235	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	417	0	0	626	0	0	311	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA			NA				
Protected Phases		2			6			4				
Permitted Phases	2						4					
Detector Phase	2	2			6		4	4				
Switch Phase												
Minimum Initial (s)	10.0	10.0			5.0		10.0	10.0				
Minimum Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (%)	50.0%	50.0%			50.0%		50.0%	50.0%				
Maximum Green (s)	18.0	18.0			18.0		17.0	17.0				
Yellow Time (s)	3.5	3.5			3.5		4.5	4.5				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	4.5	4.5			4.5			5.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			3.0		2.0	2.0				
Recall Mode	C-Max	C-Max			C-Max		None	None				
Walk Time (s)	7.0	7.0			7.0		7.0	7.0				
Flash Don't Walk (s)	10.0	10.0			11.0		10.0	10.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)	25.0	25.0			25.0			10.0				
Actuated g/C Ratio	0.56	0.56			0.56			0.22				
v/c Ratio	0.61	0.40			0.60			0.27				
Control Delay (s/veh)	17.8	7.1			9.0			11.5				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	17.8	7.1			9.0			11.5				
LOS	B	A			A			B				
Approach Delay (s/veh)		10.7			9.0			11.5				
Approach LOS		B			A			B				
Queue Length 50th (ft)	31	52			79			18				
Queue Length 95th (ft)	#120	95			154			35				
Internal Link Dist (ft)		272			1003			96			282	
Turn Bay Length (ft)												
Base Capacity (vph)	340	1055			1037			1934				
Starvation Cap Reductn	0	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.61	0.40			0.60			0.16				

Intersection Summary	
Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay (s/veh): 10.2	Intersection LOS: B

Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 43: Oak St & Coal Ave

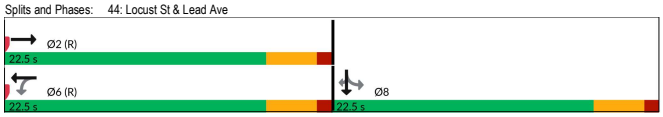


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	341	88	87	341	0	0	0	0	200	375	199
Future Volume (vph)	0	341	88	87	341	0	0	0	0	200	375	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.91	0.91
Ped Bike Factor		1.00									1.00	0.98
Frt		0.972									0.995	0.850
Flt Protected				0.950							0.984	
Satd. Flow (prot)	0	1842	0	1787	1900	0	0	0	0	0	3383	1470
Flt Permitted				0.424							0.984	
Satd. Flow (perm)	0	1842	0	798	1900	0	0	0	0	0	3380	1436
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35									9	186
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1089			338			166			84	
Travel Time (s)		24.8			7.7			3.8			1.9	
Confl. Peds. (#/hr)	1		1				1		1	2		2
Confl. Bikes (#/hr)			1			10			2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	355	92	91	355	0	0	0	0	208	391	207
Shared Lane Traffic (%)												10%
Lane Group Flow (vph)	0	447	0	91	355	0	0	0	0	0	620	186
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2					1	2	1
Detector Template		Thru		Left	Thru					Left	Thru	Right
Leading Detector (ft)		100		20	100					20	100	20
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		6		20	6					20	6	20
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA					Perm	NA	Perm
Protected Phases		2			6						8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				6						8		8
Detector Phase		2		6	6					8	8	8
Switch Phase												
Minimum Initial (s)		5.0		10.0	10.0					10.0	10.0	10.0
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	22.5
Total Split (s)		22.5		22.5	22.5					22.5	22.5	22.5
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	50.0%
Maximum Green (s)		18.0		18.0	18.0					18.0	18.0	18.0
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Recall Mode		C-Max		C-Max	C-Max					None	None	None
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	7.0
Flash Don't Walk (s)		11.0		11.0	11.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0		0	0					0	0	0
Act Effct Green (s)		21.2		21.2	21.2						14.8	14.8
Actuated g/C Ratio		0.47		0.47	0.47						0.33	0.33
v/c Ratio		0.50		0.24	0.40						0.56	0.31
Control Delay (s/veh)		13.2		10.8	10.5						13.7	3.5
Queue Delay		0.0		0.0	0.0						0.0	0.0
Total Delay (s/veh)		13.2		10.8	10.5						13.7	3.5
LOS		B		B	B						B	A
Approach Delay (s/veh)		13.2			10.6						11.4	
Approach LOS		B			B						B	
Queue Length 50th (ft)		69		13	56						67	0
Queue Length 95th (ft)		169		41	119						95	29
Internal Link Dist (ft)		1009			258			86			4	
Turn Bay Length (ft)												
Base Capacity (vph)		887		376	896						1357	686
Starvation Cap Reductn		0		0	0						0	0
Spillback Cap Reductn		0		0	0						0	0
Storage Cap Reductn		0		0	0						0	0
Reduced v/c Ratio		0.50		0.24	0.40						0.46	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 44: Locust St & Lead Ave

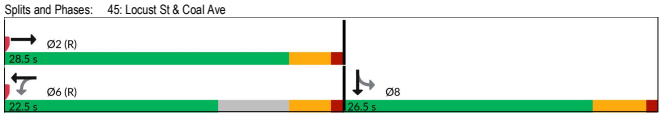


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	403	47	48	404	0	0	0	0	200	177	201
Future Volume (vph)	0	403	47	48	404	0	0	0	0	200	177	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Ped Bike Factor		1.00									0.99	
Frt		0.984									0.924	
Flt Protected					0.995					0.950	0.997	
Satd. Flow (prot)	0	3546	0	0	1890	0	0	0	0	1643	3152	0
Flt Permitted					0.921					0.950	0.997	
Satd. Flow (perm)	0	3546	0	0	1750	0	0	0	0	1643	3152	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29									209	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			352			152			197	
Travel Time (s)		8.2			8.0			3.5			4.5	
Confl. Bikes (#/hr)			12									1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	420	49	50	421	0	0	0	0	208	184	209
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	469	0	0	471	0	0	0	0	187	414	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2		1	2					1	2	
Detector Template		Thru		Left	Thru					Left	Thru	
Leading Detector (ft)		100		20	100					20	100	
Trailing Detector (ft)		0		0	0					0	0	
Detector 1 Position(ft)		0		0	0					0	0	
Detector 1 Size(ft)		6		20	6					20	6	
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						8	
Permitted Phases				6						8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		6	6					8	8	
Switch Phase												
Minimum Initial (s)		10.0		5.0	5.0					10.0	10.0	
Minimum Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (s)		28.5		22.5	22.5					26.5	26.5	
Total Split (%)		51.8%		40.9%	40.9%					48.2%	48.2%	
Maximum Green (s)		24.0		18.0	18.0					21.0	21.0	
Yellow Time (s)		3.5		3.5	3.5					4.5	4.5	
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)		0.0			0.0					0.0	0.0	
Total Lost Time (s)		4.5			4.5					5.5	5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0		3.0	3.0					2.0	2.0	
Recall Mode		C-Max		C-Max	C-Max					None	None	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)		13.0		11.0	11.0					10.0	10.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effct Green (s)		32.6			32.6					12.4	12.4	
Actuated g/C Ratio		0.59			0.59					0.23	0.23	
v/c Ratio		0.22			0.45					0.51	0.48	
Control Delay (s/veh)		5.7			8.8					23.1	10.3	
Queue Delay		0.0			0.6					0.0	0.0	
Total Delay (s/veh)		5.7			9.3					23.1	10.3	
LOS		A			A					C	B	
Approach Delay (s/veh)		5.7			9.3						14.3	
Approach LOS		A			A						B	
Queue Length 50th (ft)		28			70					60	31	
Queue Length 95th (ft)		61			163					102	57	
Internal Link Dist (ft)		280			272				72		117	
Turn Bay Length (ft)												
Base Capacity (vph)		2115			1037					627	1332	
Starvation Cap Reductn		0			248					0	0	
Spillback Cap Reductn		0			0					0	0	
Storage Cap Reductn		0			0					0	0	
Reduced v/c Ratio		0.22			0.60					0.30	0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 45: Locust St & Coal Ave



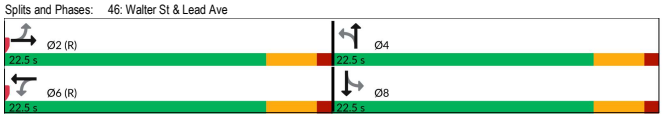
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	463	12	11	462	7	2	6	1	2	6	2
Future Volume (vph)	8	463	12	11	462	7	2	6	1	2	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			1.00			1.00	
Frt		0.997			0.998			0.985			0.973	
Flt Protected		0.999			0.999			0.989			0.990	
Satd. Flow (prot)	0	1891	0	0	1893	0	0	1847	0	0	1822	0
Flt Permitted		0.994			0.990							
Satd. Flow (perm)	0	1882	0	0	1876	0	0	1867	0	0	1840	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			1			2	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1107			1089			362			219	
Travel Time (s)		25.2			24.8			9.9			6.0	
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)						11						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	482	13	11	481	7	2	6	1	2	6	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	0	0	499	0	0	9	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		41.6			41.6			8.0			8.0	
Actuated g/C Ratio		0.92			0.92			0.18			0.18	
v/c Ratio		0.29			0.29			0.03			0.03	
Control Delay (s/veh)		2.0			2.7			25.9			14.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		2.0			2.7			25.9			14.5	
LOS		A			A			C			B	
Approach Delay (s/veh)		2.0			2.7			25.9			14.5	
Approach LOS		A			A			C			B	
Queue Length 50th (ft)		0			0			2			2	
Queue Length 95th (ft)		95			170			m12			11	
Internal Link Dist (ft)		1027			1009			282			139	
Turn Bay Length (ft)												
Base Capacity (vph)		1740			1734			747			737	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.29			0.29			0.01			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 45.1%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: Walter St & Lead Ave

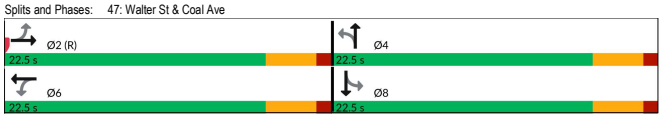


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	417	2	2	417	1	7	7	7	2	31	2
Future Volume (vph)	2	417	2	2	417	1	7	7	7	2	31	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						1.00	
Frt		0.999						0.955			0.992	
Flt Protected								0.984			0.997	
Satd. Flow (prot)	0	1898	0	0	1900	0	0	1785	0	0	1877	0
Flt Permitted		0.999			0.999			0.875			0.978	
Satd. Flow (perm)	0	1896	0	0	1898	0	0	1588	0	0	1841	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						7			2	
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1105			715			226			362	
Travel Time (s)		25.1			16.3			6.2			9.9	
Confl. Peds. (#/hr)	4		4	1		1						
Confl. Bikes (#/hr)			10									3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	434	2	2	434	1	7	7	7	2	32	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	438	0	0	437	0	0	21	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	5.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		11.0	11.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		38.2			38.2			8.0			8.0	
Actuated g/C Ratio		0.85			0.85			0.18			0.18	
v/c Ratio		0.27			0.27			0.07			0.11	
Control Delay (s/veh)		3.0			3.1			13.8			19.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		3.0			3.1			13.8			19.1	
LOS		A			A			B			B	
Approach Delay (s/veh)		3.0			3.1			13.8			19.1	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		0			0			3			9	
Queue Length 95th (ft)		79			80			16			31	
Internal Link Dist (ft)		1025			635			146			282	
Turn Bay Length (ft)												
Base Capacity (vph)		1610			1611			639			737	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.27			0.03			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 3.9		Intersection LOS: A	
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Walter St & Coal Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	34	387	35	35	387	33	1	52	420	52	72	531
Future Volume (vph)	34	387	35	35	387	33	1	52	420	52	72	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		115		90		0	0	
Storage Lanes	0		0	0		1		1		0	0	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00	0.98			1.00			1.00
Frt		0.990				0.850			0.984			
Flt Protected		0.996			0.996			0.950				0.994
Satd. Flow (prot)	0	1871	0	0	1892	1615	0	1805	3544	0	0	3588
Flt Permitted		0.944			0.934			0.293				0.766
Satd. Flow (perm)	0	1773	0	0	1775	1583	0	557	3544	0	0	2762
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		3				52			12			
Link Speed (mph)		30			30				30			30
Link Distance (ft)		546			1107				359			410
Travel Time (s)		12.4			25.2				8.2			9.3
Confl. Peds. (#/hr)	3		3	1		1					8	
Confl. Bikes (#/hr)			1			9				2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	35	403	36	36	403	34	1	54	438	54	75	553
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	474	0	0	439	34	0	55	492	0	0	628
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				12			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Number of Detectors	1	2		1	2	1	1	1	0		1	0
Detector Template	Left	Thru		Left	Thru	Right	Left	Left	Thru		Left	Thru
Leading Detector (ft)	20	100		20	100	20	20	35	0		20	0
Trailing Detector (ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Position(ft)	0	0		0	0	0	0	2	0		0	0
Detector 1 Size(ft)	20	6		20	6	20	20	33	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	72
Future Volume (vph)	72
Ideal Flow (vphpl)	1900
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.96
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1543
Right Turn on Red	Yes
Satd. Flow (RTOR)	57
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	75
Shared Lane Traffic (%)	
Lane Group Flow (vph)	75
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	0
Detector Template	Right
Leading Detector (ft)	0
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	pm+pt	NA		Perm	NA
Protected Phases		2			2		1	1	4			4
Permitted Phases	2			2		2	4	4			4	
Detector Phase	2	2		2	2	2	1	1	4		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	3.0	3.0	8.0		8.0	8.0
Minimum Split (s)	43.2	43.2		43.2	43.2	43.2	26.4	26.4	50.4		50.4	50.4
Total Split (s)	43.2	43.2		43.2	43.2	43.2	31.9	31.9	50.4		50.4	50.4
Total Split (%)	34.4%	34.4%		34.4%	34.4%	34.4%	25.4%	25.4%	40.2%		40.2%	40.2%
Maximum Green (s)	38.2	38.2		38.2	38.2	38.2	27.4	27.4	45.9		45.9	45.9
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0			0.0	0.0		0.0	0.0			0.0
Total Lost Time (s)		5.0			5.0	5.0		4.5	4.5			4.5
Lead/Lag	Lag	Lag		Lag	Lag	Lag	Lead	Lead				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes				
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	1.5	1.5	3.0		3.0	3.0
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	Max		Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	0.0	0.0	7.0		7.0	7.0
Flash Don't Walk (s)	24.0	24.0		24.0	24.0	24.0	0.0	0.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0		0	0
Act Effct Green (s)		63.2			63.2	63.2		50.0	45.9			45.9
Actuated g/C Ratio		0.50			0.50	0.50		0.40	0.37			0.37
v/c Ratio		0.53			0.49	0.04		0.21	0.38			0.62
Control Delay (s/veh)		24.2			23.4	2.2		25.2	29.6			36.0
Queue Delay		0.0			0.0	0.0		0.0	1.2			0.0
Total Delay (s/veh)		24.2			23.4	2.2		25.2	30.8			36.0
LOS		C			C	A		C	C			D
Approach Delay (s/veh)		24.2			21.9				30.2			33.2
Approach LOS		C			C				C			C
Queue Length 50th (ft)		259			235	0		26	149			218
Queue Length 95th (ft)		363			332	10		52	196			284
Internal Link Dist (ft)		466			1027				279			330
Turn Bay Length (ft)						115		90				
Base Capacity (vph)		894			894	823		597	1303			1010
Starvation Cap Reductn		0			0	0		0	564			0
Spillback Cap Reductn		0			0	0		0	0			0
Storage Cap Reductn		0			0	0		0	0			0
Reduced v/c Ratio		0.53			0.49	0.04		0.09	0.67			0.62

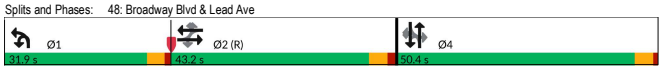
Intersection Summary
Area Type: Other
Cycle Length: 125.5
Actuated Cycle Length: 125.5
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	8.0
Minimum Split (s)	50.4
Total Split (s)	50.4
Total Split (%)	40.2%
Maximum Green (s)	45.9
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Max
Walk Time (s)	7.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	45.9
Actuated g/C Ratio	0.37
v/c Ratio	0.13
Control Delay (s/veh)	10.0
Queue Delay	0.0
Total Delay (s/veh)	10.0
LOS	B
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	9
Queue Length 95th (ft)	43
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	600
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.13

Intersection Summary

Intersection Signal Delay (s/veh): 28.1 Intersection LOS: C
Intersection Capacity Utilization 93.3% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 48: Broadway Blvd & Lead Ave



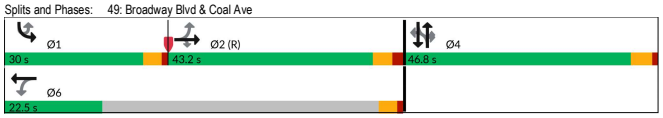
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	38	330	25	25	330	39	29	468	29	2	45	511
Future Volume (vph)	38	330	25	25	330	39	29	468	29	2	45	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	0		130		100	
Storage Lanes	0		1	0		0	0		1		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.95
Ped Bike Factor		1.00	0.98		1.00			1.00	0.97		1.00	1.00
Frt			0.850		0.987				0.850			0.988
Flt Protected		0.995			0.997			0.997			0.950	
Satd. Flow (prot)	0	1890	1615	0	1867	0	0	3599	1615	0	1805	3560
Flt Permitted		0.919			0.689			0.890			0.362	
Satd. Flow (perm)	0	1745	1576	0	1290	0	0	3213	1575	0	686	3560
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			59		8				64			9
Link Speed (mph)		30			30			30				30
Link Distance (ft)		475			1105			421				359
Travel Time (s)		10.8			25.1			9.6				8.2
Confl. Peds. (#/hr)	5		5	2		2	1		1	1	1	
Confl. Bikes (#/hr)			10						2			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	40	344	26	26	344	41	30	488	30	2	47	532
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	384	26	0	411	0	0	518	30	0	49	580
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	custom	pm+pt	NA
Protected Phases		2			6!			4			1!	4
Permitted Phases	2		2	6!			4		4	1	4	
Minimum Split (s)	43.2	43.2	43.2	22.5	22.5		46.8	46.8	46.8	30.0	30.0	46.8
Total Split (s)	43.2	43.2	43.2	22.5	22.5		46.8	46.8	46.8	30.0	30.0	46.8
Total Split (%)	36.0%	36.0%	36.0%	18.8%	18.8%		39.0%	39.0%	39.0%	25.0%	25.0%	39.0%
Maximum Green (s)	37.7	37.7	37.7	18.0	18.0		41.8	41.8	41.8	25.5	25.5	41.8
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		4.0	4.0	4.0	3.5	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		5.5	5.5		4.5			5.0	5.0		4.5	5.0
Lead/Lag	Lag	Lag	Lag							Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes							Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	0.0	0.0	7.0
Flash Don't Walk (s)	29.0	29.0	29.0	11.0	11.0		13.0	13.0	13.0	0.0	0.0	13.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	48
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Don't Walk (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	0
Act Effct Green (s)		37.7	37.7		68.7			41.8	41.8		67.8	41.8
Actuated g/C Ratio		0.31	0.31		0.57			0.35	0.35		0.57	0.35
v/c Ratio		0.70	0.05		0.55			0.46	0.05		0.08	0.47
Control Delay (s/veh)		44.3	0.8		19.3			32.1	0.8		10.9	31.4
Queue Delay		0.0	0.0		0.0			0.0	0.0		0.0	1.8
Total Delay (s/veh)		44.3	0.8		19.3			32.1	0.8		10.9	33.1
LOS		D	A		B			C	A		B	C
Approach Delay (s/veh)		41.5			19.3			30.3				31.4
Approach LOS		D			B			C				C
Queue Length 50th (ft)		261	0		186			163	0		15	180
Queue Length 95th (ft)		377	3		283			215	4		31	233
Internal Link Dist (ft)		395			1025			341				279
Turn Bay Length (ft)			200						130		100	
Base Capacity (vph)		548	535		741			1119	590		625	1245
Starvation Cap Reductn		0	0		0			0	0		0	477
Spillback Cap Reductn		0	0		0			0	0		0	0
Storage Cap Reductn		0	0		0			0	0		0	0
Reduced v/c Ratio		0.70	0.05		0.55			0.46	0.05		0.08	0.76

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 30.7		Intersection LOS: C	
Intersection Capacity Utilization 86.0%		ICU Level of Service E	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

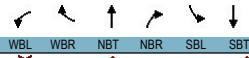
Splits and Phases: 49: Broadway Blvd & Coal Ave



Lane Group	SBR
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lanes, Volumes, Timings
50: Yale Blvd & Garfield Ave 02/17/2025



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	46	513	33	31	490
Future Volume (vph)	42	46	513	33	31	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930		0.992			
Flt Protected	0.977					0.997
Satd. Flow (prot)	1726	0	1885	0	0	1894
Flt Permitted	0.977					0.997
Satd. Flow (perm)	1726	0	1885	0	0	1894
Link Speed (mph)	30		30			30
Link Distance (ft)	2628		1321			545
Travel Time (s)	59.7		30.0			12.4
Confl. Peds. (#/hr)	6	6				
Confl. Bikes (#/hr)		2		1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	44	48	534	34	32	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	568	0	0	542
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

Lanes, Volumes, Timings
51: Girard Blvd & Garfield Ave 02/17/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	20	10	10	30	10	11	237	8	15	242	30
Future Volume (vph)	21	20	10	10	30	10	11	237	8	15	242	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.974			0.996			0.986	
Flt Protected		0.980			0.990			0.998			0.997	
Satd. Flow (prot)	0	1815	0	0	1832	0	0	1889	0	0	1868	0
Flt Permitted		0.980			0.990			0.998			0.997	
Satd. Flow (perm)	0	1815	0	0	1832	0	0	1889	0	0	1868	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2628			2626			585			335	
Travel Time (s)		59.7			59.7			13.3			7.6	
Confl. Peds. (#/hr)	5		5			2		2	2			2
Confl. Bikes (#/hr)			4			3			3			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	21	10	10	31	10	11	247	8	16	252	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	51	0	0	266	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lanes, Volumes, Timings
52: Carlisle Blvd & Garfield Ave 02/17/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	13	13	5	8	4	25	379	7	3	377	8
Future Volume (vph)	5	13	13	5	8	4	25	379	7	3	377	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	40		0	115		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.943			0.968			0.997			0.997	
Flt Protected		0.992			0.986		0.950			0.950		
Satd. Flow (prot)	0	1777	0	0	1813	0	1805	1894	0	1805	1894	0
Flt Permitted		0.992			0.986		0.950			0.950		
Satd. Flow (perm)	0	1777	0	0	1813	0	1805	1894	0	1805	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2626			1362			1599			656	
Travel Time (s)		59.7			31.0			36.3			14.9	
Confl. Peds. (#/hr)				1		1	5		5	2		2
Confl. Bikes (#/hr)			2			1			4			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	14	14	5	8	4	26	395	7	3	393	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	17	0	26	402	0	3	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lanes, Volumes, Timings
53: Morningside Dr & Garfield Ave 02/17/2025

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	11	15	15	6	2
Future Volume (vph)	5	11	15	15	6	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.907				0.966	
Flt Protected	0.985			0.976		
Satd. Flow (prot)	1697	0	0	1854	1835	0
Flt Permitted	0.985			0.976		
Satd. Flow (perm)	1697	0	0	1854	1835	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1362			278	675	
Travel Time (s)	31.0			6.3	15.3	
Confl. Peds. (#/hr)	1	1				1
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	11	16	16	6	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	32	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.6%	ICU Level of Service	A
Analysis Period (min)	15		

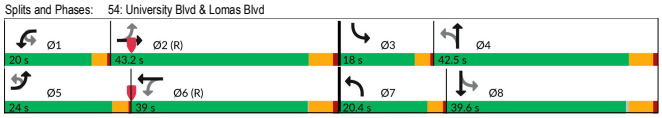
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Future Volume (vph)	1	118	845	130	1	162	866	182	137	364	169	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		147		0		130		0	104		0	200
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.980				0.974				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1805	5070	0	0	1805	5034	0	1805	3610	1615	1805
Flt Permitted		0.162				0.167			0.237			0.454
Satd. Flow (perm)	0	307	5070	0	0	317	5034	0	448	3610	1585	861
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			24				36				176	
Link Speed (mph)			35				35			30		
Link Distance (ft)			1127				1168			542		
Travel Time (s)			22.0				22.8			12.3		
Confl. Peds. (#/hr)	6	6		6	6	6		6	20		20	4
Confl. Bikes (#/hr)				2							3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	123	880	135	1	169	902	190	143	379	176	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	1015	0	0	170	1092	0	143	379	176	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	0		1	1	0		1	0	0	0
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	40	0		20	17	0		25	0	0	0
Trailing Detector (ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	3	0		0	0	0	0
Detector 1 Size(ft)	20	40	6		20	14	6		25	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Turn Type	custom	pm+pt	NA		custom	pm+pt	NA		pm+pt	NA	Free	pm+pt
Protected Phases		5	2			1	6		7	4		3
Permitted Phases	5	2			1	6			4		Free	8
Detector Phase	5	5	2		1	1	6		7	4		3

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	463	219
Future Volume (vph)	463	219
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.99	
Frt	0.952	
Flt Protected		
Satd. Flow (prot)	3418	0
Flt Permitted		
Satd. Flow (perm)	3418	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	63	
Link Speed (mph)	30	
Link Distance (ft)	544	
Travel Time (s)	12.4	
Confl. Peds. (#/hr)		4
Confl. Bikes (#/hr)		
Peak Hour Factor	0.96	0.96
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	482	228
Shared Lane Traffic (%)		
Lane Group Flow (vph)	710	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	0	
Detector Template	Thru	
Leading Detector (ft)	0	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	6.0	6.0	20.0		6.0	6.0	20.0		6.0	20.0		6.0
Minimum Split (s)	24.0	24.0	43.2		16.8	16.8	36.0		20.4	42.0		18.0
Total Split (s)	24.0	24.0	43.2		20.0	20.0	39.0		20.4	42.5		18.0
Total Split (%)	19.4%	19.4%	34.9%		16.2%	16.2%	31.5%		16.5%	34.4%		14.6%
Maximum Green (s)	20.5	20.5	37.7		16.5	16.5	33.5		16.9	37.0		14.5
Yellow Time (s)	3.0	3.0	4.5		3.0	3.0	4.5		3.0	4.5		3.0
All-Red Time (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)		3.5	5.5			3.5	5.5		3.5	5.5		3.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	1.5	3.0		2.0	3.0		1.5
Recall Mode	None	None	C-Max		None	None	C-Max		None	Max		None
Walk Time (s)			7.0				7.0			7.0		
Flash Don't Walk (s)			30.0				19.0			30.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		54.4	43.4			58.0	45.2		52.6	40.4	123.7	54.4
Actuated g/C Ratio		0.44	0.35			0.47	0.37		0.43	0.33	1.00	0.44
v/c Ratio		0.51	0.57			0.61	0.59		0.47	0.32	0.11	0.38
Control Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)		25.7	33.6			28.2	32.5		25.1	32.8	0.1	22.7
LOS		C	C			C	C		C	C	A	C
Approach Delay (s/veh)			32.8				31.9			23.0		
Approach LOS			C				C			C		
Queue Length 50th (ft)		54	232			76	247		66	120	0	83
Queue Length 95th (ft)		91	297			121	312		108	170	0	132
Internal Link Dist (ft)			1047				1088			462		
Turn Bay Length (ft)		147				130			104			200
Base Capacity (vph)		396	1794			351	1861		390	1178	1585	502
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.31	0.57			0.48	0.59		0.37	0.32	0.11	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.7			
Actuated Cycle Length: 123.7			
Offset: 11 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 54: University Blvd & Lomas Blvd



Lane Group	SBT	SBR
Switch Phase		
Minimum Initial (s)	20.0	
Minimum Split (s)	39.6	
Total Split (s)	39.6	
Total Split (%)	32.0%	
Maximum Green (s)	34.1	
Yellow Time (s)	4.5	
All-Red Time (s)	1.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	
Recall Mode	Max	
Walk Time (s)	7.0	
Flash Don't Walk (s)	25.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	41.2	
Actuated g/C Ratio	0.33	
v/c Ratio	0.60	
Control Delay (s/veh)	34.1	
Queue Delay	0.0	
Total Delay (s/veh)	34.1	
LOS	C	
Approach Delay (s/veh)	31.8	
Approach LOS	C	
Queue Length 50th (ft)	226	
Queue Length 95th (ft)	305	
Internal Link Dist (ft)	464	
Turn Bay Length (ft)		
Base Capacity (vph)	1181	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.60	
Intersection Summary		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Future Volume (vph)	3	130	822	129	7	74	1916	111	151	63	51	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		232		166		155		155	165		0	
Storage Lanes		1		1		1		1	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97					1.00	0.99		
Frt				0.850				0.850		0.933		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	5187	1615	0	1805	5187	1615	1805	1762	0	0
Flt Permitted		0.054				0.306			0.600			
Satd. Flow (perm)	0	103	5187	1570	0	581	5187	1615	1138	1762	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				134				102		33		
Link Speed (mph)			45				45			40		
Link Distance (ft)			783				2630			351		
Travel Time (s)			11.9				39.8			6.0		
Confl. Peds. (#/hr)	3	3		3					2		2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	135	856	134	7	77	1996	116	157	66	53	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	856	134	0	84	1996	116	157	119	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	R NA
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0		0
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	98	65	126
Future Volume (vph)	98	65	126
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	0		100
Storage Lanes	1		1
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	1805	1900	1615
Flt Permitted	0.681		
Satd. Flow (perm)	1294	1900	1615
Right Turn on Red			Yes
Satd. Flow (RTOR)			131
Link Speed (mph)		40	
Link Distance (ft)		283	
Travel Time (s)		4.8	
Confl. Peds. (#/hr)			
Peak Hour Factor	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	102	68	131
Shared Lane Traffic (%)			
Lane Group Flow (vph)	122	68	131
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		12	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.00	1.00	1.00
Turning Speed (mph)	15		9
Number of Detectors	1	2	1
Detector Template	Left	Thru	Right
Leading Detector (ft)	20	100	20
Trailing Detector (ft)	0	0	0
Detector 1 Position(ft)	0	0	0
Detector 1 Size(ft)	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel			
Detector 1 Extend (s)	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0
Detector 2 Position(ft)		94	
Detector 2 Size(ft)		6	
Detector 2 Type		Cl+Ex	
Detector 2 Channel			
Detector 2 Extend (s)		0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU
Turn Type	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	pm+pt	NA		Perm
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5	2		2	1	6		6	4			8
Detector Phase	5	5	2	2	1	1	6	6	7	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	3.0	16.0	16.0	3.0	12.0		12.0
Minimum Split (s)	15.6	15.6	66.3	66.3	9.1	9.1	59.8	59.8	15.6	54.6		39.0
Total Split (s)	21.6	21.6	66.3	66.3	14.4	14.4	59.8	59.8	15.6	54.6		42.0
Total Split (%)	15.5%	15.5%	47.7%	47.7%	10.4%	10.4%	43.0%	43.0%	11.2%	39.3%		30.2%
Maximum Green (s)	18.1	18.1	60.8	60.8	10.9	10.9	54.3	54.3	12.1	49.1		36.5
Yellow Time (s)	3.0	3.0	4.5	4.5	3.0	3.0	4.5	4.5	3.0	4.0		4.0
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	0.5	1.0	1.0	0.5	1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)		3.5	5.5	5.5		3.5	5.5	5.5	3.5	5.5		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Vehicle Extension (s)	1.5	1.5	4.0	4.0	1.5	1.5	4.0	4.0	1.5	3.0		3.0
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None
Walk Time (s)			7.0	7.0			7.0	7.0		7.0		7.0
Flash Don't Walk (s)			19.0	19.0			26.0	26.0		31.0		30.0
Pedestrian Calls (#/hr)			0	0			0	0		0		0
Act Effct Green (s)		94.9	84.5	84.5		89.9	81.7	81.7	35.8	33.8		
Actuated g/C Ratio		0.68	0.61	0.61		0.65	0.59	0.59	0.26	0.24		
v/c Ratio		0.76	0.27	0.13		0.20	0.66	0.12	0.45	0.26		
Control Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)		51.4	13.9	2.7		9.3	22.0	4.4	45.1	30.4		
LOS		D	B	A		A	C	A	D	C		
Approach Delay (s/veh)			17.1				20.6			38.7		
Approach LOS			B				C			D		
Queue Length 50th (ft)		63	127	0		23	418	5	116	62		
Queue Length 95th (ft)		138	182	32		49	600	40	168	109		
Internal Link Dist (ft)			703				2550			271		
Turn Bay Length (ft)		232		166		155		155	165			
Base Capacity (vph)		292	3153	1006		488	3047	990	350	681		
Starvation Cap Reductn		0	0	0		0	0	0	0	0		
Spillback Cap Reductn		0	0	0		0	0	0	0	0		
Storage Cap Reductn		0	0	0		0	0	0	0	0		
Reduced v/c Ratio		0.47	0.27	0.13		0.17	0.66	0.12	0.45	0.17		

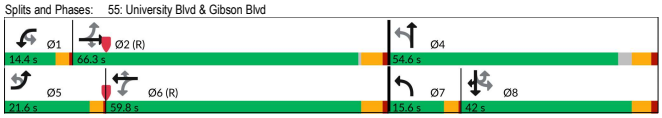
Intersection Summary			
Area Type:	Other		
Cycle Length: 139			
Actuated Cycle Length: 139			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	

Lane Group	SBL	SBT	SBR
Turn Type	Perm	NA	Prot
Protected Phases		8	8
Permitted Phases	8		
Detector Phase	8	8	8
Switch Phase			
Minimum Initial (s)	12.0	12.0	12.0
Minimum Split (s)	39.0	39.0	39.0
Total Split (s)	42.0	42.0	42.0
Total Split (%)	30.2%	30.2%	30.2%
Maximum Green (s)	36.5	36.5	36.5
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	None
Walk Time (s)	7.0	7.0	7.0
Flash Don't Walk (s)	30.0	30.0	30.0
Pedestrian Calls (#/hr)	0	0	0
Act Effct Green (s)	18.7	18.7	18.7
Actuated g/C Ratio	0.13	0.13	0.13
v/c Ratio	0.70	0.27	0.40
Control Delay (s/veh)	77.6	54.7	11.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	77.6	54.7	11.4
LOS	E	D	B
Approach Delay (s/veh)		45.7	
Approach LOS		D	
Queue Length 50th (ft)	107	56	0
Queue Length 95th (ft)	168	98	57
Internal Link Dist (ft)		203	
Turn Bay Length (ft)			100
Base Capacity (vph)	339	498	520
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.36	0.14	0.25

Intersection Summary

Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 55: University Blvd & Gibson Blvd



Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	5	147	425	64	5	36	340	20	42	139	56	29
Future Volume (vph)	5	147	425	64	5	36	340	20	42	139	56	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		155		0	80		0	
Storage Lanes		1		1		1		0	1		0	
Taper Length (ft)		25				25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97		0.92			1.00		0.99	0.96		
Frt				0.850			0.992			0.943		
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	1900	1615	0	1805	3576	0	1805	1718	0	0
Flt Permitted		0.144				0.263			0.319			
Satd. Flow (perm)	0	266	1900	1489	0	500	3576	0	598	1718	0	0
Right Turn on Red				Yes								Yes
Satd. Flow (RTOR)				101						5		
Link Speed (mph)			35				30			30		
Link Distance (ft)			766				747			1373		
Travel Time (s)			14.9				17.0			31.2		
Confl. Peds. (#/hr)	13	13		13	2	2		2	14		14	14
Confl. Bikes (#/hr)				5				1			6	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	153	443	67	5	38	354	21	44	145	58	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	443	67	0	43	375	0	44	233	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15		9	9	15		9	15		9	9
Number of Detectors	1	1	2	1	1	1	2		1	1		
Detector Template	Left	Left	Thru	Right	Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	50	100	20	20	30	100		40	40		
Trailing Detector (ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Position(ft)	0	3	0	0	0	2	0		0	0		
Detector 1 Size(ft)	20	47	6	20	20	28	6		40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												

Lane Group	SBL	SBT	SBR	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	86	267	61	142	8
Future Volume (vph)	86	267	61	142	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	190		190	0	
Storage Lanes	1		1	2	
Taper Length (ft)	25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.94
Frt			0.850	0.850	0.850
Flt Protected	0.950				
Satd. Flow (prot)	1805	1900	1583	1615	1615
Flt Permitted	0.270				
Satd. Flow (perm)	513	1900	1522	1615	1525
Right Turn on Red			Yes		Yes
Satd. Flow (RTOR)			105		101
Link Speed (mph)		30			
Link Distance (ft)		2313			
Travel Time (s)		52.6			
Confl. Peds. (#/hr)	15		15	13	13
Confl. Bikes (#/hr)			2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	2%	0%	0%
Adj. Flow (vph)	90	278	64	148	8
Shared Lane Traffic (%)					
Lane Group Flow (vph)	90	278	64	148	8
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right
Median Width(ft)		12			
Link Offset(ft)		0			
Crosswalk Width(ft)		16			
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	9
Number of Detectors	1	1	1	1	1
Detector Template	Left	Thru	Right	Right	Right
Leading Detector (ft)	38	42	45	20	20
Trailing Detector (ft)	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0
Detector 1 Size(ft)	38	42	45	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					

Lane Group	EBL2	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Detector 2 Extend (s)			0.0				0.0					
Turn Type	custom	Prot	NA	Perm	custom	Prot	NA		pm+pt	NA		
Protected Phases		5	2			1	6		7	4		
Permitted Phases	5			2	1				4			
Detector Phase	5	5	2	2	1	1	6		7	4		
Switch Phase												
Minimum Initial (s)	10.0	10.0	4.0	4.0	4.0	4.0	4.0		4.0	12.0		
Minimum Split (s)	24.0	24.0	60.0	60.0	15.6	15.6	50.4		12.0	24.0		
Total Split (s)	24.0	24.0	60.0	60.0	22.5	22.5	50.4		15.4	31.9		
Total Split (%)	17.8%	17.8%	44.5%	44.5%	16.7%	16.7%	37.4%		11.4%	23.7%		
Maximum Green (s)	18.5	18.5	54.5	54.5	17.0	17.0	44.9		10.4	26.9		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.5	3.5		
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5		
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Lost Time (s)		5.5	5.5	5.5		5.5	5.5		5.0	5.0		
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
Vehicle Extension (s)	1.0	1.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	C-Max	C-Max	None	None	Max		None	None		
Walk Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0			0.0		
Flash Don't Walk (s)	20.0	20.0	12.0	12.0	0.0	0.0	20.0			0.0		
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0			0		
Act Effct Green (s)		27.7	66.6	66.6		17.0	53.0		30.4	22.6		
Actuated g/C Ratio		0.21	0.49	0.49		0.13	0.39		0.23	0.17		
v/c Ratio		2.93	0.47	0.09		0.68	0.27		0.22	0.80		
Control Delay (s/veh)		934.3	28.1	1.7		102.7	28.4		35.3	72.0		
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0		
Total Delay (s/veh)		934.3	28.1	1.7		102.7	28.4		35.3	72.0		
LOS		F	C	A		F	C		D	E		
Approach Delay (s/veh)			239.8				36.0			66.2		
Approach LOS			F				D			E		
Queue Length 50th (ft)		~239	282	0		35	115		28	193		
Queue Length 95th (ft)		#401	410	12		#104	155		54	276		
Internal Link Dist (ft)			686				667			1293		
Turn Bay Length (ft)		250				155			80			
Base Capacity (vph)		54	938	786		69	1405		239	351		
Starvation Cap Reductn		0	0	0		0	0		0	0		
Spillback Cap Reductn		0	0	0		0	0		0	0		
Storage Cap Reductn		0	0	0		0	0		0	0		
Reduced v/c Ratio		2.93	0.47	0.09		0.62	0.27		0.18	0.66		

Intersection Summary

Area Type: Other
Cycle Length: 134.8
Actuated Cycle Length: 134.8
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.93

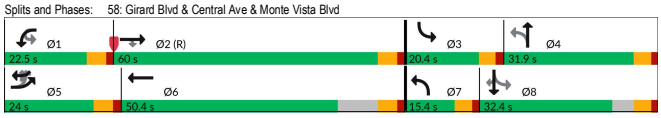
Lane Group	SBL	SBT	SBR	SWR	SWR2
Detector 2 Extend (s)					
Turn Type	pm+pt	NA	Perm	Over	Perm
Protected Phases	3	8		5	
Permitted Phases	8		8		5
Detector Phase	3	8	8	5	5
Switch Phase					
Minimum Initial (s)	4.0	12.0	12.0	10.0	10.0
Minimum Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (s)	20.4	32.4	32.4	24.0	24.0
Total Split (%)	15.1%	24.0%	24.0%	17.8%	17.8%
Maximum Green (s)	15.4	27.4	27.4	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	None	None	None
Walk Time (s)		4.0	4.0	4.0	4.0
Flash Don't Walk (s)		20.0	20.0	20.0	20.0
Pedestrian Calls (#/hr)		0	0	0	0
Act Effct Green (s)	36.5	27.4	27.4	27.7	27.7
Actuated g/C Ratio	0.27	0.20	0.20	0.21	0.21
v/c Ratio	0.38	0.72	0.16	0.45	0.02
Control Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	61.2	2.4	54.4	0.1
LOS	D	E	A	D	A
Approach Delay (s/veh)		47.9			
Approach LOS		D			
Queue Length 50th (ft)	59	233	0	115	0
Queue Length 95th (ft)	95	316	10	#209	0
Internal Link Dist (ft)		2233			
Turn Bay Length (ft)	190		190		
Base Capacity (vph)	292	450	441	331	393
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.62	0.15	0.45	0.02

Intersection Summary

Intersection Signal Delay (s/veh): 114.0 Intersection LOS: F
Intersection Capacity Utilization 83.8% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 58: Girard Blvd & Central Ave & Monte Vista Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	571	572	0	0	0
Future Volume (vph)	0	571	572	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	3539	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	3539	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		375	355		192	
Travel Time (s)		8.5	8.1		4.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	595	596	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	595	596	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 33.4% ICU Level of Service A
Analysis Period (min) 15

Lanes, Volumes, Timings
179: Elm St & Coal Ave 02/17/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	451	0	0	451	0	0	0	0	0	0	0
Future Volume (vph)	0	451	0	0	451	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		715			360			243			152	
Travel Time (s)		16.3			8.2			6.6			4.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	470	0	0	470	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	470	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.1%	ICU Level of Service A	
Analysis Period (min)	15		

Arterial Level of Service
Baseline 02/17/2025

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	15.2	26.0	0.1	14
	168	1.5	3.8	0.0	17
	102	0.1	6.4	0.1	29
Carlisle Blvd	25	4.6	27.2	0.2	26
Wellesley Dr	28	15.8	37.8	0.2	20
Girard Blvd	30	7.1	39.4	0.3	26
Columbia Dr	32	13.7	34.9	0.2	22
	106	4.0	31.1	0.2	26
Yale Blvd	34	2.2	9.3	0.1	24
	108	0.6	5.9	0.0	27
Buena Vista Dr	36	9.1	16.7	0.1	15
University Blvd	38	13.8	35.2	0.2	19
Cedar St	40	5.2	49.2	0.4	30
Mulberry St	184	0.9	8.8	0.1	28
Oak St	42	6.1	13.9	0.1	18
Locust St	44	7.6	15.5	0.1	15
Walter St	46	3.4	25.7	0.2	29
Broadway Blvd	48	17.1	39.8	0.2	19
Total		128.1	426.7	2.7	23

Arterial Level of Service
Baseline 02/17/2025

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	32.0	42.1	0.1	8
Walter St	47	5.9	30.3	0.2	25
	179	1.3	15.8	0.1	31
Locust St	45	6.1	13.6	0.1	18
Oak St	43	6.0	14.2	0.1	17
Spruce St	41	1.8	22.0	0.2	34
	98	0.7	23.4	0.2	30
	165	0.4	13.1	0.1	29
University Blvd	39	23.1	33.3	0.1	11
	104	1.7	6.4	0.0	18
	91	0.4	10.0	0.1	29
Buena Vista Dr	37	4.0	17.5	0.1	24
Yale Blvd	35	3.1	15.4	0.1	26
	84	0.7	9.5	0.1	28
Stanford Dr	33	9.1	24.7	0.1	21
Girard Blvd	31	8.6	41.0	0.3	25
Bryn Mawr Dr	29	13.8	37.8	0.2	20
Carlisle Blvd	26	5.3	35.9	0.3	29
Morningside Dr	27	1.2	27.8	0.3	34
Total		125.1	433.8	2.8	23

Arterial Level of Service
Baseline 02/17/2025

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	0.8	16.6	0.1	30
Morningside Dr	24	13.0	16.8	0.0	7
	168	1.4	3.7	0.0	18
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	5.5	28.5	0.2	24
Wellesley Dr	28	15.6	38.9	0.2	20
Girard Blvd	30	8.3	39.2	0.3	26
Columbia Dr	32	12.6	34.4	0.2	22
	106	3.6	30.5	0.2	27
Yale Blvd	34	4.3	11.5	0.1	20
	108	1.0	6.4	0.0	25
Buena Vista Dr	36	11.8	19.3	0.1	13
University Blvd	38	11.0	31.4	0.2	22
Cedar St	40	4.5	48.2	0.4	30
Mulberry St	184	0.8	8.7	0.1	29
Oak St	42	3.5	11.0	0.1	23
Locust St	44	5.0	12.4	0.1	19
Walter St	46	1.5	23.3	0.2	32
Broadway Blvd	48	8.4	31.5	0.2	24
Total		112.6	418.8	2.8	24

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	24.1	33.2	0.1	10
Walter St	47	5.4	29.5	0.2	26
	179	1.4	17.2	0.1	28
Locust St	45	2.7	10.3	0.1	24
Oak St	43	4.9	13.3	0.1	18
Spruce St	41	2.8	24.8	0.2	30
	98	1.3	24.8	0.2	28
	165	0.7	13.4	0.1	28
University Blvd	39	24.7	35.7	0.1	10
	104	1.2	5.9	0.0	19
	91	0.4	10.0	0.1	29
Buena Vista Dr	37	3.7	17.5	0.1	24
Yale Blvd	35	5.1	17.9	0.1	22
	84	0.9	9.9	0.1	27
Stanford Dr	33	9.0	25.1	0.1	21
Girard Blvd	31	13.3	46.0	0.3	22
Bryn Mawr Dr	29	13.1	35.9	0.2	21
Carlisle Blvd	26	7.9	41.4	0.3	25
Morningside Dr	27	1.8	29.6	0.3	32
Total		124.4	441.5	2.8	23

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	25.5	29.1	0.0	4
	168	1.9	4.1	0.0	16
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	7.6	30.5	0.2	23
Wellesley Dr	28	13.2	36.5	0.2	21
Girard Blvd	30	11.0	41.4	0.3	24
Columbia Dr	32	13.4	35.7	0.2	22
	106	4.2	31.5	0.2	26
Yale Blvd	34	5.5	12.8	0.1	18
	108	1.2	6.7	0.0	24
Buena Vista Dr	36	7.4	15.5	0.1	16
University Blvd	38	14.9	34.9	0.2	20
Cedar St	40	8.2	51.8	0.4	28
Mulberry St	184	1.4	9.4	0.1	26
Oak St	42	4.2	11.6	0.1	22
Locust St	44	11.4	19.0	0.1	12
Walter St	46	3.5	26.0	0.2	29
Broadway Blvd	48	10.2	32.1	0.2	23
Total		144.9	435.3	2.6	22

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	26.6	35.3	0.1	9
Walter St	47	4.6	29.2	0.2	26
	179	1.6	16.9	0.1	29
Locust St	45	6.5	14.0	0.1	18
Oak St	43	8.7	17.0	0.1	14
Spruce St	41	2.1	24.6	0.2	30
	98	1.2	22.5	0.2	31
	165	0.8	13.2	0.1	29
University Blvd	39	61.1	71.7	0.1	5
	104	2.3	6.9	0.0	16
	91	0.4	9.7	0.1	30
Buena Vista Dr	37	3.1	16.4	0.1	26
Yale Blvd	35	4.4	17.3	0.1	23
	84	0.9	9.9	0.1	27
Stanford Dr	33	10.1	25.7	0.1	20
Girard Blvd	31	15.4	47.6	0.3	21
Bryn Mawr Dr	29	11.9	33.8	0.2	23
Carlisle Blvd	26	10.5	44.0	0.3	23
Morningside Dr	27	2.1	31.3	0.3	30
Total		174.1	487.0	2.8	21

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	14.9	18.3	0.0	7
	168	1.7	4.0	0.0	16
	102	0.2	6.4	0.1	29
Carlisle Blvd	25	5.3	27.4	0.2	25
Wellesley Dr	28	17.6	39.7	0.2	19
Girard Blvd	30	8.0	40.8	0.3	25
Columbia Dr	32	18.5	39.9	0.2	19
	106	48.1	71.2	0.2	11
	75	31.4	35.0	0.0	3
Yale Blvd	34	45.5	49.2	0.0	2
	68	2.3	5.0	0.0	15
	108	0.2	3.8	0.0	27
Buena Vista Dr	36	10.4	17.4	0.1	14
University Blvd	38	18.9	39.8	0.2	17
Cedar St	40	4.8	50.0	0.4	29
Mulberry St	184	0.8	8.6	0.1	29
Oak St	42	9.3	16.6	0.1	15
Locust St	44	8.8	17.0	0.1	14
Walter St	46	4.4	24.4	0.2	31
Broadway Blvd	48	14.8	38.1	0.2	20
Total		265.9	552.8	2.6	17

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	40.9	50.8	0.1	6
	63	2.6	9.2	0.1	20
Walter St	47	5.5	24.1	0.2	23
	179	2.7	17.5	0.1	28
Locust St	45	14.6	22.4	0.1	11
Oak St	43	14.5	22.8	0.1	11
Spruce St	41	3.2	22.8	0.2	32
	98	1.4	24.5	0.2	29
	165	1.2	13.9	0.1	27
University Blvd	39	53.1	61.9	0.1	6
	104	2.3	7.0	0.0	16
	91	0.4	10.4	0.1	28
Buena Vista Dr	37	1.9	16.5	0.1	26
Yale Blvd	35	1.1	12.9	0.1	31
	84	0.4	9.7	0.1	27
Stanford Dr	33	11.2	27.5	0.1	19
Girard Blvd	31	13.4	46.2	0.3	22
Bryn Mawr Dr	29	12.4	30.7	0.2	25
Carlisle Blvd	26	7.2	37.4	0.3	27
Morningside Dr	27	1.9	30.9	0.3	30
Total		191.8	499.2	2.8	20

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	95.4	111.2	0.2	5
Morningside Dr	24	57.7	61.1	0.0	2
	168	2.4	4.8	0.0	13
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	4.6	27.1	0.2	26
Wellesley Dr	28	17.3	38.7	0.2	20
Girard Blvd	30	12.4	43.6	0.3	23
Columbia Dr	32	13.8	36.2	0.2	21
	106	19.0	45.6	0.2	18
	67	27.4	31.1	0.0	4
Yale Blvd	34	48.5	60.5	0.0	2
	64	2.4	5.0	0.0	14
	108	0.3	4.1	0.0	26
Buena Vista Dr	36	8.6	16.1	0.1	15
University Blvd	38	13.6	33.3	0.2	20
Cedar St	40	5.4	48.3	0.4	30
Mulberry St	184	0.9	8.7	0.1	28
Oak St	42	4.6	12.2	0.1	20
Locust St	44	8.5	15.9	0.1	15
Walter St	46	4.1	24.9	0.2	30
Broadway Blvd	48	14.3	37.4	0.2	20
Total		361.4	672.5	2.8	15

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	32.3	42.0	0.1	8
	63	2.4	8.8	0.1	21
Walter St	47	5.1	23.8	0.2	24
	179	2.5	18.6	0.1	26
Locust St	45	10.7	18.2	0.1	13
Oak St	43	11.9	20.8	0.1	12
Spruce St	41	4.9	27.4	0.2	27
	98	1.9	24.5	0.2	29
	165	1.1	13.6	0.1	28
University Blvd	39	30.1	40.6	0.1	9
	104	1.8	6.4	0.0	17
	91	0.5	10.0	0.1	29
Buena Vista Dr	37	4.2	17.6	0.1	24
Yale Blvd	35	10.4	22.4	0.1	18
	84	1.8	10.8	0.1	25
Stanford Dr	33	17.5	33.8	0.1	15
Girard Blvd	31	18.3	50.4	0.3	20
Bryn Mawr Dr	29	15.8	39.8	0.2	19
Carlisle Blvd	26	7.7	41.2	0.3	25
Morningside Dr	27	2.3	28.3	0.3	33
Total		183.1	499.0	2.8	20

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	57.5	60.9	0.0	2
	168	2.3	4.8	0.0	14
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	10.4	32.8	0.2	21
Wellesley Dr	28	14.5	37.3	0.2	21
Girard Blvd	30	11.2	41.2	0.3	25
Columbia Dr	32	11.7	34.7	0.2	22
	106	3.9	31.0	0.2	26
	67	4.3	7.9	0.0	14
Yale Blvd	34	21.4	27.6	0.0	5
	64	2.2	5.5	0.0	17
	108	0.3	3.1	0.0	26
Buena Vista Dr	36	10.1	17.5	0.1	14
University Blvd	38	17.7	38.0	0.2	18
Cedar St	40	6.5	50.9	0.4	29
Mulberry St	184	1.1	9.4	0.1	27
Oak St	42	8.9	16.3	0.1	16
Locust St	44	12.7	20.5	0.1	11
Walter St	46	3.5	26.0	0.2	29
Broadway Blvd	48	18.3	41.7	0.2	18
Total		218.8	513.5	2.6	19

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	125.1	145.5	0.1	2
	63	3.0	9.2	0.0	19
Walter St	47	3.8	22.5	0.2	26
	179	3.5	19.2	0.1	25
Locust St	45	15.0	23.0	0.1	11
Oak St	43	8.7	17.2	0.1	14
Spruce St	41	4.8	27.8	0.2	27
	98	23.3	44.9	0.2	16
	165	74.3	85.6	0.1	4
University Blvd	39	145.3	154.8	0.1	2
	104	2.3	7.0	0.0	16
	91	0.4	10.2	0.1	29
Buena Vista Dr	37	2.7	16.9	0.1	25
Yale Blvd	35	7.8	20.5	0.1	20
	84	1.4	10.2	0.1	26
Stanford Dr	33	13.7	30.0	0.1	17
Girard Blvd	31	19.8	53.6	0.3	19
Bryn Mawr Dr	29	16.9	39.4	0.2	19
Carlisle Blvd	26	18.8	52.6	0.3	19
Morningside Dr	27	3.4	32.6	0.3	29
Total		494.2	822.7	2.8	12

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	59.9	63.2	0.0	2
	168	2.4	4.8	0.0	13
	102	0.2	6.5	0.1	29
Carlisle Blvd	25	6.0	27.5	0.2	25
Wellesley Dr	28	17.1	39.4	0.2	20
Girard Blvd	30	5.3	32.5	0.3	31
Columbia Dr	32	26.2	43.5	0.2	18
	106	99.6	121.8	0.2	7
	75	37.5	41.1	0.0	3
Yale Blvd	34	55.6	67.2	0.0	2
	68	2.3	4.9	0.0	15
	108	0.3	3.9	0.0	26
Buena Vista Dr	36	11.6	19.4	0.1	13
University Blvd	38	12.8	33.6	0.2	20
Cedar St	40	4.8	51.3	0.4	28
Mulberry St	184	0.8	8.7	0.1	28
Oak St	42	4.5	11.8	0.1	21
Locust St	44	8.5	16.4	0.1	14
Walter St	46	3.5	24.9	0.2	30
Broadway Blvd	48	16.7	40.2	0.2	19
Total		375.7	662.7	2.6	14

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	62.4	72.2	0.1	5
	63	3.2	9.9	0.1	19
Walter St	47	4.5	23.1	0.2	24
	179	3.2	18.4	0.1	27
Locust St	45	14.9	22.5	0.1	11
Oak St	43	10.4	19.0	0.1	13
Spruce St	41	2.7	22.0	0.2	34
	98	1.5	24.2	0.2	29
	165	1.1	13.8	0.1	28
University Blvd	39	40.8	50.1	0.1	7
	104	2.1	6.7	0.0	17
	91	0.4	10.3	0.1	28
Buena Vista Dr	37	1.9	15.7	0.1	27
Yale Blvd	35	4.1	16.4	0.1	24
	84	1.0	9.7	0.1	27
Stanford Dr	33	10.8	26.5	0.1	19
Girard Blvd	31	13.4	48.1	0.3	21
Bryn Mawr Dr	29	17.6	39.4	0.2	19
Carlisle Blvd	26	8.8	39.6	0.3	26
Morningside Dr	27	2.3	30.5	0.3	31
Total		207.3	518.2	2.8	19

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	100.5	114.7	0.2	5
Morningside Dr	24	57.8	61.2	0.0	2
	168	2.4	4.8	0.0	14
	102	0.2	6.5	0.1	29
Carlisle Blvd	25	5.9	28.6	0.2	24
Wellesley Dr	28	15.3	38.3	0.2	20
Girard Blvd	30	9.6	40.0	0.3	25
Columbia Dr	32	15.5	39.2	0.2	20
	106	7.1	33.7	0.2	24
	67	11.4	15.1	0.0	8
Yale Blvd	34	27.2	33.2	0.0	4
	64	2.4	5.0	0.0	14
	108	0.3	4.1	0.0	26
Buena Vista Dr	36	10.2	17.6	0.1	14
University Blvd	38	12.6	32.7	0.2	21
Cedar St	40	4.5	45.8	0.4	32
Mulberry St	184	0.8	8.0	0.1	32
Oak St	42	2.6	9.6	0.1	26
Locust St	44	11.1	18.2	0.1	13
Walter St	46	3.7	25.2	0.2	30
Broadway Blvd	48	19.1	43.0	0.2	18
Total		320.2	624.6	2.8	16

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	58.4	68.3	0.1	5
	63	3.0	9.4	0.1	19
Walter St	47	6.8	25.1	0.2	23
	179	2.7	17.9	0.1	28
Locust St	45	11.4	18.9	0.1	13
Oak St	43	11.6	19.9	0.1	12
Spruce St	41	2.7	22.3	0.2	33
	98	1.1	23.7	0.2	30
	165	1.3	13.8	0.1	28
University Blvd	39	57.7	67.5	0.1	5
	104	1.6	6.4	0.0	18
	91	0.4	10.1	0.1	29
Buena Vista Dr	37	4.8	18.3	0.1	23
Yale Blvd	35	11.1	23.8	0.1	17
	84	2.1	11.1	0.1	24
Stanford Dr	33	13.8	30.3	0.1	17
Girard Blvd	31	20.7	53.2	0.3	19
Bryn Mawr Dr	29	16.3	40.0	0.2	19
Carlisle Blvd	26	12.2	46.0	0.3	22
Morningside Dr	27	2.5	29.1	0.3	32
Total		242.3	554.9	2.8	18

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	60.1	63.5	0.0	2
	168	2.4	4.8	0.0	13
	102	0.2	6.5	0.1	29
Carlisle Blvd	25	5.4	27.7	0.2	25
Wellesley Dr	28	13.4	34.5	0.2	22
Girard Blvd	30	13.1	42.8	0.3	24
Columbia Dr	32	11.5	34.4	0.2	22
	106	4.5	31.7	0.2	26
	67	3.9	7.6	0.0	15
Yale Blvd	34	21.0	26.5	0.0	5
	64	2.2	5.4	0.0	18
	108	0.4	3.2	0.0	25
Buena Vista Dr	36	10.2	17.6	0.1	14
University Blvd	38	16.9	36.9	0.2	18
Cedar St	40	3.9	43.7	0.4	33
Mulberry St	184	0.7	8.6	0.1	29
Oak St	42	4.1	10.9	0.1	23
Locust St	44	11.0	18.2	0.1	13
Walter St	46	3.1	24.7	0.2	30
Broadway Blvd	48	15.0	35.8	0.2	21
Total		203.0	484.8	2.6	20

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	83.0	93.1	0.1	4
	63	3.0	9.3	0.0	19
Walter St	47	9.2	27.9	0.2	21
	179	3.0	18.8	0.1	26
Locust St	45	4.5	12.1	0.1	20
Oak St	43	6.7	14.7	0.1	16
Spruce St	41	3.0	24.9	0.2	30
	98	2.1	24.6	0.2	29
	165	9.9	22.0	0.1	17
University Blvd	39	76.9	86.4	0.1	4
	104	1.9	6.5	0.0	17
	91	0.4	10.3	0.1	28
Buena Vista Dr	37	0.7	14.6	0.1	29
Yale Blvd	35	7.1	18.4	0.1	22
	84	1.6	10.9	0.1	25
Stanford Dr	33	12.7	28.5	0.1	18
Girard Blvd	31	20.6	53.8	0.3	19
Bryn Mawr Dr	29	19.7	42.5	0.2	18
Carlisle Blvd	26	23.1	56.8	0.3	18
Morningside Dr	27	3.1	32.7	0.3	28
Total		291.9	608.8	2.8	16

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	35.0	38.4	0.0	3
	168	2.4	4.8	0.0	14
	102	0.2	6.5	0.1	29
Carlisle Blvd	25	5.5	26.9	0.2	26
Wellesley Dr	28	19.0	41.6	0.2	18
Girard Blvd	30	5.2	31.3	0.3	32
Columbia Dr	32	13.8	31.7	0.2	25
	106	5.5	32.2	0.2	25
	75	7.9	11.9	0.0	9
Yale Blvd	34	20.2	23.3	0.0	5
	68	1.7	4.3	0.0	18
	108	0.3	3.9	0.0	26
Buena Vista Dr	36	6.2	13.9	0.1	18
University Blvd	38	10.4	29.1	0.2	23
Cedar St	40	5.6	50.0	0.4	29
Mulberry St	184	0.8	8.5	0.1	29
Oak St	42	5.6	12.6	0.1	20
Locust St	44	8.7	16.9	0.1	14
Walter St	46	2.4	21.3	0.2	35
Broadway Blvd	48	12.6	36.9	0.2	20
Total		169.0	446.1	2.6	21

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	25.4	35.3	0.1	9
	63	1.7	8.0	0.1	24
Walter St	47	1.1	19.9	0.2	28
	179	0.9	15.4	0.1	32
Locust St	45	3.5	11.1	0.1	22
Oak St	43	5.8	13.8	0.1	17
Spruce St	41	1.4	21.0	0.2	35
	98	1.1	24.7	0.2	29
	165	0.6	13.5	0.1	28
University Blvd	39	21.3	31.1	0.1	12
	104	1.8	6.5	0.0	17
	91	0.6	10.1	0.1	29
Buena Vista Dr	37	3.5	18.1	0.1	24
Yale Blvd	35	7.9	20.6	0.1	20
	84	1.5	10.0	0.1	27
Stanford Dr	33	14.1	29.6	0.1	17
Girard Blvd	31	12.0	45.0	0.3	23
Bryn Mawr Dr	29	15.0	35.8	0.2	21
Carlisle Blvd	26	8.3	37.9	0.3	27
Morningside Dr	27	2.7	32.5	0.3	29
Total		130.0	439.5	2.8	23

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	24.4	42.3	0.2	13
Morningside Dr	24	47.2	50.7	0.0	2
	168	2.3	4.8	0.0	14
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	8.0	30.0	0.2	23
Wellesley Dr	28	14.9	36.9	0.2	21
Girard Blvd	30	12.5	43.7	0.3	23
Columbia Dr	32	12.1	34.9	0.2	22
	106	4.4	31.7	0.2	26
	67	3.8	7.9	0.0	15
Yale Blvd	34	17.0	21.5	0.0	6
	64	2.1	4.6	0.0	15
	108	0.3	4.1	0.0	26
Buena Vista Dr	36	8.8	16.6	0.1	15
University Blvd	38	11.5	31.3	0.2	22
Cedar St	40	3.2	45.9	0.4	32
Mulberry St	184	0.4	7.8	0.1	32
Oak St	42	3.2	10.0	0.1	25
Locust St	44	5.5	12.3	0.1	19
Walter St	46	1.6	24.1	0.2	31
Broadway Blvd	48	11.3	35.2	0.2	21
Total		194.8	502.9	2.8	20

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	25.5	34.7	0.1	9
	63	1.7	7.7	0.1	24
Walter St	47	2.1	21.1	0.2	27
	179	1.0	16.9	0.1	29
Locust St	45	2.2	9.5	0.1	26
Oak St	43	4.3	13.0	0.1	18
Spruce St	41	2.6	24.1	0.2	31
	98	1.4	24.5	0.2	29
	165	0.6	13.1	0.1	29
University Blvd	39	33.3	44.1	0.1	8
	104	1.9	6.6	0.0	17
	91	0.5	10.0	0.1	29
Buena Vista Dr	37	3.2	16.8	0.1	25
Yale Blvd	35	11.1	24.0	0.1	17
	84	2.7	11.9	0.1	22
Stanford Dr	33	13.5	30.1	0.1	17
Girard Blvd	31	20.2	52.9	0.3	19
Bryn Mawr Dr	29	17.4	40.7	0.2	19
Carlisle Blvd	26	10.1	43.1	0.3	24
Morningside Dr	27	3.1	28.6	0.3	33
Total		158.6	473.4	2.8	21

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	57.0	60.3	0.0	2
	168	2.4	4.8	0.0	14
	102	0.2	6.4	0.1	29
Carlisle Blvd	25	7.7	29.6	0.2	24
Wellesley Dr	28	13.4	34.3	0.2	22
Girard Blvd	30	13.4	43.7	0.3	23
Columbia Dr	32	15.5	37.3	0.2	21
	106	4.6	31.6	0.2	26
	67	6.5	10.4	0.0	11
Yale Blvd	34	14.2	18.0	0.0	7
	64	1.5	4.8	0.0	20
	108	0.2	3.1	0.0	26
Buena Vista Dr	36	5.0	11.9	0.1	21
University Blvd	38	10.2	29.3	0.2	23
Cedar St	40	5.2	45.0	0.4	32
Mulberry St	184	0.7	8.4	0.1	29
Oak St	42	4.5	11.4	0.1	22
Locust St	44	8.7	15.9	0.1	14
Walter St	46	4.9	27.7	0.2	27
Broadway Blvd	48	16.6	39.0	0.2	19
Total		192.2	472.9	2.6	20

Arterial Level of Service
Baseline 02/17/2025

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	34.8	44.1	0.1	7
	63	2.4	8.7	0.0	20
Walter St	47	3.9	23.3	0.2	25
	179	1.8	17.4	0.1	28
Locust St	45	4.1	11.7	0.1	21
Oak St	43	7.5	16.0	0.1	15
Spruce St	41	2.8	25.4	0.2	29
	98	1.5	24.1	0.2	29
	165	1.2	14.0	0.1	27
University Blvd	39	72.3	82.7	0.1	4
	104	2.1	6.8	0.0	17
	91	0.4	10.1	0.1	29
Buena Vista Dr	37	3.5	17.2	0.1	25
Yale Blvd	35	8.3	20.3	0.1	20
	84	2.6	11.5	0.1	23
Stanford Dr	33	14.3	29.6	0.1	17
Girard Blvd	31	23.2	55.5	0.3	18
Bryn Mawr Dr	29	16.6	38.5	0.2	20
Carlisle Blvd	26	14.7	48.3	0.3	21
Morningside Dr	27	3.3	32.7	0.3	28
Total		221.3	538.0	2.8	19

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	0.4	17.8	0.1	25
Morningside Dr	24	14.6	19.3	0.0	6
	168	1.3	4.1	0.0	16
	102	0.1	7.5	0.1	25
Carlisle Blvd	25	6.3	31.8	0.2	22
Wellesley Dr	28	12.2	37.9	0.2	20
Girard Blvd	30	5.1	44.1	0.3	23
Columbia Dr	32	8.3	35.0	0.2	22
	106	2.7	35.4	0.2	23
Yale Blvd	34	4.4	13.1	0.1	17
	108	0.8	7.2	0.0	23
Buena Vista Dr	36	10.8	20.1	0.1	12
University Blvd	38	15.8	41.1	0.2	17
Cedar St	40	4.6	52.1	0.4	28
Mulberry St	184	0.7	10.1	0.1	24
Oak St	42	7.9	17.0	0.1	15
Locust St	44	9.0	18.6	0.1	12
Walter St	46	2.0	25.5	0.2	29
Broadway Blvd	48	14.2	42.6	0.2	18
Total		121.1	480.1	2.7	21

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	26.8	38.5	0.1	8
Walter St	47	3.1	31.4	0.2	24
	179	1.2	18.2	0.1	27
Locust St	45	3.2	12.3	0.1	20
Oak St	43	5.2	15.0	0.1	16
Spruce St	41	1.5	25.2	0.2	29
	98	1.0	28.0	0.2	25
	165	0.7	15.5	0.1	25
University Blvd	39	15.7	28.4	0.1	13
	104	0.9	6.5	0.0	17
	91	0.5	12.1	0.1	24
Buena Vista Dr	37	2.6	18.4	0.1	23
Yale Blvd	35	1.6	15.1	0.1	26
	84	0.4	11.3	0.1	24
Stanford Dr	33	6.7	26.3	0.1	20
Girard Blvd	31	2.1	42.3	0.3	24
Bryn Mawr Dr	29	6.1	29.9	0.2	26
Carlisle Blvd	26	3.9	41.4	0.3	25
Morningside Dr	27	0.9	31.4	0.3	30
Total		83.9	447.3	2.8	22

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	0.5	19.8	0.1	25
Morningside Dr	24	12.1	16.9	0.0	7
	168	1.0	3.7	0.0	17
	102	0.1	7.6	0.1	25
Carlisle Blvd	25	3.8	30.6	0.2	23
Wellesley Dr	28	12.2	40.5	0.2	19
Girard Blvd	30	8.0	46.5	0.3	22
Columbia Dr	32	7.4	34.9	0.2	22
	106	2.5	34.9	0.2	23
Yale Blvd	34	6.6	15.3	0.1	15
	108	0.7	7.0	0.0	23
Buena Vista Dr	36	11.7	21.1	0.1	12
University Blvd	38	17.6	42.7	0.2	16
Cedar St	40	4.1	56.1	0.4	26
Mulberry St	184	0.7	10.3	0.1	24
Oak St	42	1.8	10.8	0.1	23
Locust St	44	5.3	14.2	0.1	16
Walter St	46	2.5	26.4	0.2	28
Broadway Blvd	48	40.9	69.5	0.2	11
Total		139.7	508.8	2.8	20

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	29.1	40.1	0.1	8
Walter St	47	4.7	33.8	0.2	22
	179	2.6	20.5	0.1	24
Locust St	45	5.2	14.4	0.1	17
Oak St	43	7.3	17.3	0.1	14
Spruce St	41	5.7	31.8	0.2	23
	98	1.3	29.7	0.2	24
	165	0.5	15.2	0.1	25
University Blvd	39	36.4	49.7	0.1	7
	104	1.4	7.1	0.0	16
	91	0.4	12.0	0.1	24
Buena Vista Dr	37	2.2	18.4	0.1	23
Yale Blvd	35	6.2	21.2	0.1	19
	84	1.1	11.9	0.1	22
Stanford Dr	33	10.8	30.4	0.1	17
Girard Blvd	31	3.4	42.4	0.3	24
Bryn Mawr Dr	29	10.3	39.2	0.2	19
Carlisle Blvd	26	8.2	48.1	0.3	21
Morningside Dr	27	1.4	30.8	0.3	30
Total		138.4	514.1	2.8	19

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	15.2	19.9	0.0	6
	102	1.0	10.7	0.1	23
Carlisle Blvd	25	6.9	32.5	0.2	21
Wellesley Dr	28	9.1	33.5	0.2	23
Girard Blvd	30	9.4	45.9	0.3	22
Columbia Dr	32	5.0	33.5	0.2	23
	106	2.0	34.1	0.2	24
Yale Blvd	34	6.2	14.2	0.1	16
	108	1.0	7.2	0.0	22
Buena Vista Dr	36	9.9	19.2	0.1	13
University Blvd	38	9.2	33.6	0.2	20
Cedar St	40	3.2	49.3	0.4	30
Mulberry St	184	0.5	9.9	0.1	25
Oak St	42	3.5	11.7	0.1	21
Locust St	44	7.1	15.2	0.1	15
Walter St	46	2.1	28.9	0.2	26
Broadway Blvd	48	13.2	41.8	0.2	18
Total		104.6	441.3	2.6	21

Arterial Level of Service
Baseline 03/04/2025

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	32.4	42.7	0.1	8
Walter St	47	7.8	37.2	0.2	20
	179	3.0	22.4	0.1	22
Locust St	45	5.2	14.4	0.1	17
Oak St	43	7.2	17.4	0.1	14
Spruce St	41	2.5	28.1	0.2	26
	98	1.8	30.0	0.2	23
	165	1.3	16.7	0.1	23
University Blvd	39	80.4	92.3	0.1	4
	104	1.4	6.9	0.0	16
	91	0.5	11.9	0.1	24
Buena Vista Dr	37	0.7	16.6	0.1	26
Yale Blvd	35	4.6	19.2	0.1	21
	84	1.1	12.1	0.1	22
Stanford Dr	33	11.1	29.3	0.1	18
Girard Blvd	31	4.3	43.7	0.3	23
Bryn Mawr Dr	29	11.8	40.1	0.2	19
Carlisle Blvd	26	9.9	50.6	0.3	20
Morningside Dr	27	1.9	35.4	0.3	26
Total		189.0	567.1	2.8	18

Arterial Level of Service
Baseline 02/17/2025

Arterial Level of Service: EB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	48	8.6	20.0	0.1	19
Walter St	46	2.7	25.6	0.2	29
Locust St	44	13.0	35.9	0.2	21
Oak St	42	7.0	14.8	0.1	16
	87	1.0	6.7	0.1	38
Cedar St	40	2.5	10.7	0.1	24
University Blvd	38	18.3	57.2	0.4	26
Buena Vista Dr	36	13.3	34.1	0.2	20
	108	1.7	9.6	0.1	25
Yale Blvd	34	6.3	11.0	0.0	15
	106	1.4	9.6	0.1	24
Columbia Dr	32	18.8	43.3	0.2	19
Girard Blvd	30	7.0	30.4	0.2	25
Wellesley Dr	28	10.6	38.4	0.3	26
Carlisle Blvd	25	5.0	27.4	0.2	28
	102	1.4	20.1	0.2	35
Morningside Dr	24	6.0	13.0	0.1	19
	166	1.2	5.2	0.0	23
Total		126.0	413.0	2.7	24

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	166	0.4	17.4	0.1	31
Morningside Dr	24	11.9	15.7	0.0	8
	102	1.5	10.1	0.1	25
Carlisle Blvd	25	5.3	27.3	0.2	26
Wellesley Dr	28	11.9	33.5	0.2	23
Girard Blvd	30	8.8	43.0	0.3	23
Columbia Dr	32	12.9	34.5	0.2	22
	106	3.0	30.4	0.2	27
Yale Blvd	34	2.2	9.3	0.1	24
	108	0.6	6.2	0.0	26
Buena Vista Dr	36	6.3	14.1	0.1	17
University Blvd	38	12.5	32.4	0.2	21
Cedar St	40	3.9	38.3	0.4	39
	87	0.3	6.9	0.1	37
Oak St	42	4.6	12.4	0.1	20
Locust St	44	9.5	15.4	0.1	15
Walter St	46	2.2	18.9	0.2	39
Broadway Blvd	48	13.1	37.0	0.2	20
Total		110.7	402.8	2.8	25

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	14.2	23.5	0.1	14
Walter St	47	2.5	20.9	0.2	37
	179	0.9	14.0	0.1	35
Locust St	45	8.5	16.0	0.1	15
Oak St	43	6.9	14.0	0.1	17
Spruce St	41	2.0	17.5	0.2	42
	98	0.4	23.7	0.2	30
	165	0.3	13.5	0.1	28
University Blvd	39	11.2	18.7	0.1	20
	104	0.7	6.1	0.0	19
	91	0.3	9.9	0.1	29
Buena Vista Dr	37	0.4	14.8	0.1	29
Yale Blvd	35	3.0	15.9	0.1	25
	84	1.0	9.7	0.1	27
Stanford Dr	33	11.7	27.8	0.1	19
Girard Blvd	31	19.6	54.5	0.3	19
Bryn Mawr Dr	29	8.5	31.2	0.2	24
Carlisle Blvd	26	8.5	41.0	0.3	25
Morningside Dr	27	2.3	32.9	0.3	28
Total		102.8	405.6	2.8	25

Arterial Level of Service: WB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	27	0.4	16.5	0.1	31
Carlisle Blvd	26	4.6	34.6	0.3	27
Bryn Mawr Dr	29	12.6	38.7	0.3	27
Girard Blvd	31	4.7	29.3	0.2	26
Stanford Dr	33	14.4	45.4	0.3	23
	84	2.0	19.3	0.1	27
Yale Blvd	35	3.7	11.7	0.1	23
Buena Vista Dr	37	1.4	13.6	0.1	30
	91	0.8	14.7	0.1	29
	104	2.8	11.9	0.1	24
University Blvd	39	13.1	19.2	0.0	7
	165	1.9	14.7	0.1	25
	98	0.7	13.3	0.1	29
Spruce St	41	2.1	20.8	0.2	34
Oak St	43	6.7	21.2	0.2	36
Locust St	45	9.5	17.8	0.1	13
Elm St	179	1.3	8.7	0.1	28
Walter St	47	2.3	17.2	0.1	28
Broadway Blvd	49	15.5	37.6	0.2	20
Total		100.4	406.5	2.8	25

Arterial Level of Service: EB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	48	20.1	31.6	0.1	12
Walter St	46	3.1	26.4	0.2	29
Locust St	44	5.4	25.5	0.2	29
Oak St	42	21.3	28.3	0.1	8
	87	1.1	6.9	0.1	37
Cedar St	40	0.8	8.6	0.1	29
University Blvd	38	21.6	65.6	0.4	22
Buena Vista Dr	36	16.6	39.1	0.2	17
	108	2.7	10.9	0.1	23
Yale Blvd	34	13.3	18.5	0.0	9
	106	2.1	10.0	0.1	23
Columbia Dr	32	15.0	39.3	0.2	21
Girard Blvd	30	15.1	40.2	0.2	19
Wellesley Dr	28	10.7	39.7	0.3	25
Carlisle Blvd	25	13.8	37.7	0.2	20
	102	2.9	23.6	0.2	29
	168	3.1	9.4	0.1	20
Morningside Dr	24	8.7	10.7	0.0	6
Total		177.5	471.9	2.7	21

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	11.8	26.9	0.1	19
	168	1.1	3.4	0.0	19
	102	0.2	6.6	0.1	28
Carlisle Blvd	25	7.6	29.8	0.2	23
Wellesley Dr	28	14.6	38.3	0.2	20
Girard Blvd	30	12.2	44.3	0.3	23
Columbia Dr	32	11.7	36.3	0.2	21
	106	3.2	30.3	0.2	27
Yale Blvd	34	5.4	12.6	0.1	18
	108	0.9	6.5	0.0	25
Buena Vista Dr	36	11.5	19.4	0.1	13
University Blvd	38	15.1	36.4	0.2	19
Cedar St	40	5.3	51.1	0.4	29
	87	0.3	8.7	0.1	29
Oak St	42	4.8	11.2	0.1	22
Locust St	44	2.9	9.7	0.1	24
Walter St	46	4.6	28.6	0.2	26
Broadway Blvd	48	11.4	35.1	0.2	22
Total		124.7	435.2	2.7	23

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	31.7	42.4	0.1	8
Walter St	47	9.3	33.8	0.2	22
	179	2.1	17.9	0.1	27
Locust St	45	6.9	14.7	0.1	17
Oak St	43	4.5	12.9	0.1	19
Spruce St	41	3.3	22.0	0.2	34
	98	1.8	24.4	0.2	29
	165	1.3	14.0	0.1	27
University Blvd	39	14.4	22.3	0.1	16
	104	1.6	6.8	0.0	17
	91	0.6	10.2	0.1	28
Buena Vista Dr	37	4.6	17.9	0.1	24
Yale Blvd	35	5.5	17.4	0.1	23
	84	1.5	10.7	0.1	25
Stanford Dr	33	14.3	29.3	0.1	18
Girard Blvd	31	15.0	48.6	0.3	21
Bryn Mawr Dr	29	11.3	35.8	0.2	21
Carlisle Blvd	26	10.7	44.4	0.3	23
Morningside Dr	27	3.2	34.3	0.3	27
Total		143.6	459.6	2.8	22

Arterial Level of Service: WB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	27	0.3	17.4	0.1	30
Carlisle Blvd	26	3.8	33.5	0.3	28
Bryn Mawr Dr	29	14.0	44.4	0.3	23
Girard Blvd	31	5.9	29.5	0.2	26
Stanford Dr	33	12.7	43.3	0.3	24
	84	1.8	19.6	0.1	26
Yale Blvd	35	3.0	10.7	0.1	25
Buena Vista Dr	37	1.3	14.1	0.1	29
	91	0.4	15.1	0.1	28
	104	1.1	10.7	0.1	27
University Blvd	39	23.6	26.5	0.0	4
	165	1.6	14.3	0.1	25
	98	0.5	13.2	0.1	29
Spruce St	41	2.5	24.6	0.2	29
Oak St	43	8.0	25.9	0.2	29
Locust St	45	7.6	16.2	0.1	15
Elm St	179	1.3	7.9	0.1	31
Walter St	47	2.5	17.8	0.1	27
Broadway Blvd	49	7.2	30.8	0.2	24
Total		99.3	415.4	2.8	25

Arterial Level of Service: EB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	48	12.3	23.2	0.1	16
Walter St	46	3.3	28.2	0.2	27
Locust St	44	17.6	40.5	0.2	18
Oak St	42	16.1	30.0	0.1	10
	89	1.4	8.4	0.1	31
Cedar St	40	0.3	8.1	0.1	30
University Blvd	38	46.3	82.3	0.4	18
Buena Vista Dr	36	10.9	32.2	0.2	21
	108	1.8	9.8	0.1	25
Yale Blvd	34	11.4	16.1	0.0	10
	106	1.6	9.4	0.1	24
Columbia Dr	32	13.7	40.0	0.2	20
Girard Blvd	30	11.4	36.3	0.2	21
Wellesley Dr	28	11.7	41.5	0.3	24
Carlisle Blvd	25	13.9	37.9	0.2	20
	102	2.5	25.1	0.2	28
	168	2.0	8.1	0.1	23
Morningside Dr	24	3.9	5.8	0.0	11
Total		182.0	482.9	2.7	20

Arterial Level of Service: WB Lead Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	24	81.1	93.1	0.1	4
	168	2.3	4.5	0.0	14
	102	0.2	6.5	0.1	29
Carlisle Blvd	25	8.7	31.3	0.2	22
Wellesley Dr	28	17.4	39.4	0.2	20
Girard Blvd	30	16.8	47.8	0.3	21
Columbia Dr	32	7.5	30.4	0.2	25
	106	3.0	30.3	0.2	27
Yale Blvd	34	8.2	15.3	0.1	15
	108	1.0	6.4	0.0	25
Buena Vista Dr	36	10.6	18.4	0.1	13
University Blvd	38	45.2	65.0	0.2	12
Cedar St	40	5.0	43.2	0.4	34
	89	0.4	8.2	0.1	30
Oak St	42	6.2	13.6	0.1	19
Locust St	44	8.9	16.4	0.1	14
Walter St	46	2.6	22.9	0.2	32
Broadway Blvd	48	23.4	47.3	0.2	16
Total		248.6	540.3	2.7	18

Arterial Level of Service: EB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Broadway Blvd	49	32.8	42.2	0.1	8
Walter St	47	4.5	28.5	0.2	26
Elm St	179	1.8	18.3	0.1	27
Locust St	45	10.7	18.5	0.1	13
Oak St	43	9.6	18.2	0.1	13
Spruce St	41	2.7	25.1	0.2	29
	98	1.9	24.7	0.2	28
	165	1.2	13.5	0.1	28
University Blvd	39	28.4	38.9	0.1	9
	104	1.3	6.2	0.0	18
	91	0.5	10.0	0.1	29
Buena Vista Dr	37	1.5	14.5	0.1	29
Yale Blvd	35	8.1	20.3	0.1	20
	84	1.6	10.8	0.1	25
Stanford Dr	33	8.5	24.9	0.1	21
Girard Blvd	31	14.6	47.0	0.3	22
Bryn Mawr Dr	29	11.6	31.1	0.2	25
Carlisle Blvd	26	9.2	42.7	0.3	24
Morningside Dr	27	2.7	31.0	0.3	30
Total		153.1	466.4	2.8	21

Arterial Level of Service: WB Coal Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morningside Dr	27	0.3	14.5	0.1	31
Carlisle Blvd	26	13.7	41.5	0.3	22
Bryn Mawr Dr	29	10.1	38.0	0.3	27
Girard Blvd	31	11.4	34.8	0.2	22
Stanford Dr	33	12.3	39.9	0.3	26
	84	2.6	19.6	0.1	26
Yale Blvd	35	14.2	22.7	0.1	12
Buena Vista Dr	37	3.5	15.2	0.1	26
	91	0.7	14.6	0.1	29
	104	15.3	24.5	0.1	12
University Blvd	39	31.4	34.2	0.0	3
	165	1.6	14.2	0.1	25
	98	0.5	13.1	0.1	29
Spruce St	41	1.2	22.0	0.2	32
Oak St	43	5.8	24.9	0.2	30
Locust St	45	7.1	15.3	0.1	16
Elm St	179	1.1	8.1	0.1	30
Walter St	47	2.7	17.6	0.1	28
Broadway Blvd	49	13.5	35.4	0.2	21
Total		148.9	450.2	2.8	22

Appendix F: Predictive Crash Method Reports

Coal Avenue

Highway Safety Software Text Report

File Name:	Coal_CrashAnalysis_SL.xhz
Analyst:	SM
Agency:	Lee Engineering
Jurisdiction:	
Date:	3/10/2025
Analysis Year:	2025
Project Description:	
Units:	U.S. Customary

The total number of predicted crashes is:	39.740	crashes/year

Section 1: Coal & Broadway

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

Input

AADT MAJ	6984	veh/day
AADT MIN	11783	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	4	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	121	ped/day
Red Light Cameras	No	

Observed Crashes

Number of Observed Crashes	49

Output

SPF

Nspfint	3.040
Nspfint (FI)	0.703
Nspfint (PDO)	2.337
Npedbase	0.034
Npedi	0.192
Nbikei	0.039

CMFs

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.391
CMFlanes_PDO (Number of Lanes)	1.093
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

Predicted Crashes

	crashes/year	crashes/million entering veh
Npedbase	0.034	

Npedi	0.192	
Nbikei	0.039	
Nbi	3.218	
Nbi (FI)	0.891	
Nbi (PDO)	2.327	
Npredictedint	3.449	0.504
Npredictedint (FI)	1.122	0.164
Npredictedint (PDO)	2.327	0.340

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.027	0.059	0.137
Head-On Collision	0.039	0.035	0.030	0.070
Angle Collision	0.837	0.746	0.733	1.706
Sideswipe	0.059	0.053	0.145	0.337
Other Multiple-Vehicle	0.029	0.026	0.012	0.028
Single-Vehicle Crashes	0.006	0.005	0.021	0.049

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	23	
Total Observed Crashes (PDO)	26	
Average Observed Crashes (FI)	4.600	
Average Observed Crashes (PDO)	5.200	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.401	
Weighted Adjustment (PDO), w	0.176	
Expected Crashes (FI)	3.205	0.468
Expected Crashes (PDO)	4.694	0.685
Total Expected Crashes	7.899	1.153

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$507,031.00
Annual Societal Crash Cost (PDO)	$34,735.60
Total Annual Societal Crash Cost	$541,766.60

Section 2: Broadway - Locust

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	8524	veh/day
Length	0.418	mi
Illinois State	No	
Right Shoulder Width	4.0	ft
Parking Type - Left	ParallelParking	
Curb Length Left On-Street Parking	0.16	mi
Number of Major Commercial Driveways	3	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	27	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	66	obj./mi

----------Observed Crashes----------

Number of Observed Crashes 39

Output

SPF

Nspfrsmv	1.473
Nspfrsmv (FI)	0.374
Nspfrsmv (PDO)	1.099
Nspfrssv	0.269
Nspfrssv (FI)	0.090
Nspfrssv (PDO)	0.179
Npedr	0.042
Nbiker	0.027

CMFs

CMFrsw_FI (Right Shoulder Width)	1.000
CMFrsw_PDO (Right Shoulder Width)	1.000
CMFpk_par_FI (On-Street Parallel Parking)	1.021
CMFpk_par_PDO (On-Street Parallel Parking)	1.050
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.096
CMFdwc_mj_PDO (Major Commercial Driveway)	1.170
CMFdwc_mn_FI (Minor Driveway)	1.285
CMFdwc_mn_PDO (Minor Driveway)	1.085
CMFfo_FI (Roadside Fixed-Object)	1.660
CMFfo_PDO (Roadside Fixed-Object)	1.660
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.003		
Nbrmv (FI)	0.539		
Nbrmv (PDO)	1.464		
Nbrsv	0.446		
Nbrsv (FI)	0.150		
Nbrsv (PDO)	0.297		
Npedr	0.042		
Nbiker	0.027		
Nbr	2.449		
Nbr (FI)	0.689		
Nbr (PDO)	1.761		
Npredictedrs	2.518	6.024	193.619
Npredictedrs (FI)	0.757	1.812	58.227
Npredictedrs (PDO)	1.761	4.212	135.392

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.750	0.223
Other Single-Vehicle Collision	0.000	0.000	0.250	0.074
Total Single-Vehicle Crashes	0.000	0.000	1.000	0.297
Multiple-Vehicle				
Rear-End Collision	0.182	0.098	0.126	0.184
Head-On Collision	0.091	0.049	0.250	0.366
Angle Collision	0.273	0.147	0.251	0.367
Sideswipe Collision, Same Direction	0.000	0.000	0.042	0.061
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.455	0.245	0.334	0.489
Total Multiple-Vehicle Crashes	1.001	0.539	1.003	1.468

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	11		crashes
Total Observed Crashes (MV, PDO)	24		crashes
Total Observed Crashes (SV, FI)	0		crashes
Total Observed Crashes (SV, PDO)	4		crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	2.200		
Average Observed Crashes (MV, PDO)	4.800		
Average Observed Crashes (SV, FI)	0.000		
Average Observed Crashes (SV, PDO)	0.800		
Overdispersion Parameter (MV, FI), k	0.287		
Overdispersion Parameter (MV, PDO), k	0.204		
Overdispersion Parameter (SV, FI), k	0.728		
Overdispersion Parameter (SV, PDO), k	0.287		
Weighted Adjustment (MV, FI), w	0.866		
Weighted Adjustment (MV, PDO), w	0.770		
Weighted Adjustment (SV, FI), w	0.902		
Weighted Adjustment (SV, PDO), w	0.921		
Expected Crashes (MV, FI)	0.762		
Expected Crashes (MV, PDO)	2.231		
Expected Crashes (SV, FI)	0.135		
Expected Crashes (SV, PDO)	0.337		
Expected Crashes (FI)	0.897	2.146	68.973
Expected Crashes (PDO)	2.568	6.144	197.462
Total Expected Crashes	3.465	8.289	266.435

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$141,905.40
Annual Societal Crash Cost (PDO)	$19,003.20
Total Annual Societal Crash Cost	$160,908.60

Section 3: Coal & Locust

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	8523	veh/day
AADT MIN	5120	veh/day
Method Type	One-Way	
Number of Lanes MAJ	3	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	162	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	36

========== Output ==========

---------- SPF ----------

Nspfint	2.400
Nspfint (FI)	0.535
Nspfint (PDO)	1.865
Npedbase	0.032

Npedi	0.120
Nbikei	0.028

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.171
CMFlanes_PDO (Number of Lanes)	1.045
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	2.780
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.032	
Npedi	0.120	
Nbikei	0.028	
Nbi	2.346	
Nbi (FI)	0.571	
Nbi (PDO)	1.775	
Npredictedint	2.494	0.501
Npredictedint (FI)	0.719	0.144
Npredictedint (PDO)	1.775	0.356

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.017	0.059	0.105
Head-On Collision	0.039	0.022	0.030	0.053
Angle Collision	0.837	0.478	0.733	1.301
Sideswipe	0.059	0.034	0.145	0.257
Other Multiple-Vehicle	0.029	0.017	0.012	0.021
Single-Vehicle Crashes	0.006	0.003	0.021	0.037

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	12	
Total Observed Crashes (PDO)	24	
Average Observed Crashes (FI)	2.400	
Average Observed Crashes (PDO)	4.800	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.511	
Weighted Adjustment (PDO), w	0.218	
Expected Crashes (FI)	1.541	0.309
Expected Crashes (PDO)	4.141	0.832
Total Expected Crashes	5.682	1.141

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$243,786.20
Annual Societal Crash Cost (PDO)	$30,643.40
Total Annual Societal Crash Cost	$274,429.60

Section 4: Locust - Oak

Facility Type	Urban
Section Type	Segment
Model Type	Two-lane One-way Arterials (2O)

Area Type	Urban	

Input

AADT	11615	veh/day
Length	0.068	mi
Illinois State	No	
Right Shoulder Width	4.0	ft
Number of Major Commercial Driveways	0	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	0	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	59	obj./mi

Observed Crashes

Number of Observed Crashes	4

Output

SPF

Nspfrsmv	0.335
Nspfrsmv (FI)	0.090
Nspfrsmv (PDO)	0.245
Nspfrssv	0.050
Nspfrssv (FI)	0.017
Nspfrssv (PDO)	0.033
Npedr	0.007
Nbiker	0.004

CMFs

CMFrsw_FI (Right Shoulder Width)	1.000
CMFrsw_PDO (Right Shoulder Width)	1.000
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	0.965
CMFdwc_mj_PDO (Major Commercial Driveway)	0.941
CMFdwc_mn_FI (Minor Driveway)	0.955
CMFdwc_mn_PDO (Minor Driveway)	0.985
CMFfo_FI (Roadside Fixed-Object)	1.590
CMFfo_PDO (Roadside Fixed-Object)	1.590
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	0.310		
Nbrmv (FI)	0.083		
Nbrmv (PDO)	0.227		
Nbrsv	0.079		
Nbrsv (FI)	0.027		
Nbrsv (PDO)	0.053		
Npedr	0.007		
Nbiker	0.004		
Nbr	0.389		
Nbr (FI)	0.109		
Nbr (PDO)	0.280		
Npredictedrs	0.400	5.886	138.833
Npredictedrs (FI)	0.120	1.769	41.728
Npredictedrs (PDO)	0.280	4.117	97.106

Crashes by Severity Level and Collision Type

Collision Type	Fatal-and-Injury Prop.	N	Property-Damage-Only Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	0.000	0.000	0.000	0.000
Total Single-Vehicle Crashes	0.000	0.000	0.000	0.000
Multiple-Vehicle				
Rear-End Collision	0.000	0.000	0.500	0.114
Head-On Collision	0.000	0.000	0.000	0.000
Angle Collision	0.000	0.000	0.000	0.000
Sideswipe Collision, Same Direction	0.000	0.000	0.000	0.000
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.000	0.000	0.500	0.114
Total Multiple-Vehicle Crashes	0.000	0.000	1.000	0.227

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	0	crashes
Total Observed Crashes (MV, PDO)	4	crashes
Total Observed Crashes (SV, FI)	0	crashes
Total Observed Crashes (SV, PDO)	0	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	0.000		
Average Observed Crashes (MV, PDO)	0.800		
Average Observed Crashes (SV, FI)	0.000		
Average Observed Crashes (SV, PDO)	0.000		
Overdispersion Parameter (MV, FI), k	1.765		
Overdispersion Parameter (MV, PDO), k	1.252		
Overdispersion Parameter (SV, FI), k	4.474		
Overdispersion Parameter (SV, PDO), k	1.765		
Weighted Adjustment (MV, FI), w	0.872		
Weighted Adjustment (MV, PDO), w	0.779		
Weighted Adjustment (SV, FI), w	0.892		
Weighted Adjustment (SV, PDO), w	0.914		
Expected Crashes (MV, FI)	0.072		
Expected Crashes (MV, PDO)	0.354		
Expected Crashes (SV, FI)	0.024		
Expected Crashes (SV, PDO)	0.048		
Expected Crashes (FI)	0.096	1.412	33.300
Expected Crashes (PDO)	0.402	5.912	139.446
Total Expected Crashes	0.498	7.324	172.746

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$15,187.20
Annual Societal Crash Cost (PDO)	$2,974.80
Total Annual Societal Crash Cost	$18,162.00

Section 5: Coal & Oak

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	11615	veh/day
AADT MIN	4617	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	

Illinois State	No	
Lighting	Yes	
Pedestrian Volume	463	ped/day
Red Light Cameras	No	

Observed Crashes

Number of Observed Crashes	49

Output

SPF

Nspfint	2.566
Nspfint (FI)	0.545
Nspfint (PDO)	2.021
Npedbase	0.049
Npedi	0.276
Nbikei	0.028

CMFs

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

Predicted Crashes

	crashes/year	crashes/million entering veh
Npedbase	0.049	
Npedi	0.276	
Nbikei	0.028	
Nbi	2.338	
Nbi (FI)	0.496	
Nbi (PDO)	1.841	
Npredictedint	2.642	0.446
Npredictedint (FI)	0.801	0.135
Npredictedint (PDO)	1.841	0.311

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.015	0.059	0.109
Head-On Collision	0.039	0.019	0.030	0.055
Angle Collision	0.837	0.416	0.733	1.349
Sideswipe	0.059	0.029	0.145	0.267
Other Multiple-Vehicle	0.029	0.014	0.012	0.022
Single-Vehicle Crashes	0.006	0.003	0.021	0.039

Expected Crashes

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	17	
Total Observed Crashes (PDO)	32	
Average Observed Crashes (FI)	3.400	
Average Observed Crashes (PDO)	6.400	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.484	
Weighted Adjustment (PDO), w	0.212	

Expected Crashes (FI)	2.142	0.362
Expected Crashes (PDO)	5.433	0.917
Total Expected Crashes	7.575	1.279

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$338,864.40
Annual Societal Crash Cost (PDO)	$40,204.20
Total Annual Societal Crash Cost	$379,068.60

Section 6: Oak - University

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	10393	veh/day
Length	0.602	mi
Illinois State	No	
Right Shoulder Width	6.0	ft
Parking Type - Left	ParallelParking	
Curb Length Left On-Street Parking	0.11	mi
Number of Major Commercial Driveways	7	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	20	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	93	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	87

========== Output ==========

---------- SPF ----------

Nspfrsmv	2.629
Nspfrsmv (FI)	0.692
Nspfrsmv (PDO)	1.937
Nspfrssv	0.421
Nspfrssv (FI)	0.141
Nspfrssv (PDO)	0.280
Npedr	0.075
Nbiker	0.048

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	0.961
CMFrsw_PDO (Right Shoulder Width)	0.991
CMFpk_par_FI (On-Street Parallel Parking)	1.010
CMFpk_par_PDO (On-Street Parallel Parking)	1.024
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.186
CMFdwc_mj_PDO (Major Commercial Driveway)	1.339
CMFdwc_mn_FI (Minor Driveway)	1.113
CMFdwc_mn_PDO (Minor Driveway)	1.035
CMFfo_FI (Roadside Fixed-Object)	1.930
CMFfo_PDO (Roadside Fixed-Object)	1.930
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	3.608		
Nbrmv (FI)	0.886		
Nbrmv (PDO)	2.722		
Nbrsv	0.797		
Nbrsv (FI)	0.262		
Nbrsv (PDO)	0.536		
Npedr	0.075		
Nbiker	0.048		
Nbr	4.406		
Nbr (FI)	1.148		
Nbr (PDO)	3.258		
Npredictedrs	4.529	7.523	198.323
Npredictedrs (FI)	1.271	2.111	55.653
Npredictedrs (PDO)	3.258	5.412	142.670

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.200	0.107
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.400	0.105	0.000	0.000
Other Single-Vehicle Collision	0.600	0.157	0.800	0.428
Total Single-Vehicle Crashes	1.000	0.262	1.000	0.536
Multiple-Vehicle				
Rear-End Collision	0.048	0.043	0.090	0.245
Head-On Collision	0.000	0.000	0.125	0.340
Angle Collision	0.095	0.084	0.107	0.291
Sideswipe Collision, Same Direction	0.095	0.084	0.089	0.242
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.715	0.633	0.590	1.606
Total Multiple-Vehicle Crashes	0.953	0.844	1.001	2.725

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	21	crashes
Total Observed Crashes (MV, PDO)	56	crashes
Total Observed Crashes (SV, FI)	5	crashes
Total Observed Crashes (SV, PDO)	5	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	4.200		
Average Observed Crashes (MV, PDO)	11.200		
Average Observed Crashes (SV, FI)	1.000		
Average Observed Crashes (SV, PDO)	1.000		
Overdispersion Parameter (MV, FI), k	0.199		
Overdispersion Parameter (MV, PDO), k	0.141		
Overdispersion Parameter (SV, FI), k	0.505		
Overdispersion Parameter (SV, PDO), k	0.199		
Weighted Adjustment (MV, FI), w	0.850		
Weighted Adjustment (MV, PDO), w	0.723		
Weighted Adjustment (SV, FI), w	0.883		
Weighted Adjustment (SV, PDO), w	0.904		
Expected Crashes (MV, FI)	1.383		
Expected Crashes (MV, PDO)	5.070		
Expected Crashes (SV, FI)	0.348		
Expected Crashes (SV, PDO)	0.581		
Expected Crashes (FI)	1.731	2.875	75.800
Expected Crashes (PDO)	5.651	9.387	247.454
Total Expected Crashes	7.382	12.262	323.254

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$273,844.20
Annual Societal Crash Cost (PDO)	$41,817.40

Total Annual Societal Crash Cost	$315,661.60

Section 7: Coal & University

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

Input

AADT MAJ	10393	veh/day
AADT MIN	8383	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	6	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	1885	ped/day
Red Light Cameras	No	

Observed Crashes

Number of Observed Crashes	46

Output

SPF

Nspfint	3.071
Nspfint (FI)	0.667
Nspfint (PDO)	2.404
Npedbase	0.139
Npedi	0.777
Nbikei	0.043

CMFs

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.729
CMFlanes_PDO (Number of Lanes)	1.142
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

Predicted Crashes

	crashes/year	crashes/million entering veh
Npedbase	0.139	
Npedi	0.777	
Nbikei	0.043	
Nbi	3.551	
Nbi (FI)	1.050	
Nbi (PDO)	2.501	
Npredictedint	4.370	0.638
Npredictedint (FI)	1.869	0.273
Npredictedint (PDO)	2.501	0.365

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N

Rear-End Collision	0.030	0.031	0.059	0.148
Head-On Collision	0.039	0.041	0.030	0.075
Angle Collision	0.837	0.879	0.733	1.833
Sideswipe	0.059	0.062	0.145	0.363
Other Multiple-Vehicle	0.029	0.030	0.012	0.030
Single-Vehicle Crashes	0.006	0.006	0.021	0.053

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	10	
Total Observed Crashes (PDO)	36	
Average Observed Crashes (FI)	2.000	
Average Observed Crashes (PDO)	7.200	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.287	
Weighted Adjustment (PDO), w	0.166	
Expected Crashes (FI)	1.962	0.286
Expected Crashes (PDO)	6.420	0.937
Total Expected Crashes	8.382	1.223

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$310,388.40
Annual Societal Crash Cost (PDO)	$47,508.00
Total Annual Societal Crash Cost	$357,896.40

Section 8: University - Yale

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	8936	veh/day
Length	0.343	mi
Illinois State	No	
Right Shoulder Width	6.0	ft
Parking Type - Right	ParallelParking	
Curb Length Right On-Street Parking	0.05	mi
Number of Major Commercial Driveways	0	
Number of Major Industrial Driveways	6	
Number of Minor Driveways	14	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	30	ft
Fixed-Object Density	82	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	27

========== Output ==========

---------- SPF ----------

Nspfrsmv	1.272
Nspfrsmv (FI)	0.326
Nspfrsmv (PDO)	0.946
Nspfrssv	0.225
Nspfrssv (FI)	0.076
Nspfrssv (PDO)	0.150
Npedr	0.026

Nbiker	0.017

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	0.961
CMFrsw_PDO (Right Shoulder Width)	0.991
CMFpk_par_FI (On-Street Parallel Parking)	1.008
CMFpk_par_PDO (On-Street Parallel Parking)	1.019
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	0.965
CMFdwc_mj_PDO (Major Commercial Driveway)	0.941
CMFdwc_mn_FI (Minor Driveway)	1.152
CMFdwc_mn_PDO (Minor Driveway)	1.047
CMFfo_FI (Roadside Fixed-Object)	1.049
CMFfo_PDO (Roadside Fixed-Object)	1.000
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	1.292		
Nbrmv (FI)	0.351		
Nbrmv (PDO)	0.941		
Nbrsv	0.224		
Nbrsv (FI)	0.076		
Nbrsv (PDO)	0.148		
Npedr	0.026		
Nbiker	0.017		
Nbr	1.517		
Nbr (FI)	0.427		
Nbr (PDO)	1.090		
Npredictedrs	1.559	4.546	139.381
Npredictedrs (FI)	0.470	1.370	41.993
Npredictedrs (PDO)	1.090	3.176	97.389

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.750	0.111
Other Single-Vehicle Collision	1.000	0.076	0.250	0.037
Total Single-Vehicle Crashes	1.000	0.076	1.000	0.148
Multiple-Vehicle				
Rear-End Collision	0.333	0.117	0.118	0.111
Head-On Collision	0.000	0.000	0.118	0.111
Angle Collision	0.333	0.117	0.235	0.221
Sideswipe Collision, Same Direction	0.000	0.000	0.177	0.167
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.333	0.117	0.353	0.332
Total Multiple-Vehicle Crashes	0.999	0.351	1.001	0.942

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	3	crashes
Total Observed Crashes (MV, PDO)	17	crashes
Total Observed Crashes (SV, FI)	3	crashes
Total Observed Crashes (SV, PDO)	4	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	0.600		
Average Observed Crashes (MV, PDO)	3.400		
Average Observed Crashes (SV, FI)	0.600		
Average Observed Crashes (SV, PDO)	0.800		
Overdispersion Parameter (MV, FI), k	0.350		

Overdispersion Parameter (MV, PDO), k	0.248		
Overdispersion Parameter (SV, FI), k	0.887		
Overdispersion Parameter (SV, PDO), k	0.350		
Weighted Adjustment (MV, FI), w	0.891		
Weighted Adjustment (MV, PDO), w	0.811		
Weighted Adjustment (SV, FI), w	0.937		
Weighted Adjustment (SV, PDO), w	0.951		
Expected Crashes (MV, FI)	0.378		
Expected Crashes (MV, PDO)	1.406		
Expected Crashes (SV, FI)	0.109		
Expected Crashes (SV, PDO)	0.180		
Expected Crashes (FI)	0.487	1.420	43.531
Expected Crashes (PDO)	1.586	4.624	141.766
Total Expected Crashes	2.073	6.044	185.297

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$77,043.40
Annual Societal Crash Cost (PDO)	$11,736.40
Total Annual Societal Crash Cost	$88,779.80

Section 9: Coal & Yale

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	8936	veh/day
AADT MIN	10307	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	760	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	59

========== Output ==========

---------- SPF ----------

Nspfint	3.146
Nspfint (FI)	0.700
Nspfint (PDO)	2.446
Npedbase	0.084
Npedi	0.527
Nbikei	0.034

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350

CMF3p (Alcohol Sales)	1.120

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.084	
Npedi	0.527	
Nbikei	0.034	
Nbi	2.866	
Nbi (FI)	0.638	
Nbi (PDO)	2.228	
Npredictedint	3.428	0.488
Npredictedint (FI)	1.200	0.171
Npredictedint (PDO)	2.228	0.317

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.019	0.059	0.131
Head-On Collision	0.039	0.025	0.030	0.067
Angle Collision	0.837	0.534	0.733	1.633
Sideswipe	0.059	0.038	0.145	0.323
Other Multiple-Vehicle	0.029	0.018	0.012	0.027
Single-Vehicle Crashes	0.006	0.004	0.021	0.047

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	24	
Total Observed Crashes (PDO)	35	
Average Observed Crashes (FI)	4.800	
Average Observed Crashes (PDO)	7.000	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.385	
Weighted Adjustment (PDO), w	0.182	
Expected Crashes (FI)	3.414	0.486
Expected Crashes (PDO)	6.131	0.873
Total Expected Crashes	9.545	1.359

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$540,094.80
Annual Societal Crash Cost (PDO)	$45,369.40
Total Annual Societal Crash Cost	$585,464.20

Section 10: Yale - Girard

Facility Type	Urban
Section Type	Segment
Model Type	Two-lane One-way Arterials (2O)
Area Type	Urban

========== Input ==========

AADT	10926	veh/day
Length	0.504	mi
Illinois State	No	
Right Shoulder Width	6.0	ft
Number of Major Commercial Driveways	3	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	18	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	54	ft

Fixed-Object Density	99	obj./mi

Observed Crashes

Number of Observed Crashes	86

Output

SPF

Nspfrsmv	2.323
Nspfrsmv (FI)	0.617
Nspfrsmv (PDO)	1.706
Nspfrssv	0.360
Nspfrssv (FI)	0.121
Nspfrssv (PDO)	0.240
Npedr	0.052
Nbiker	0.034

CMFs

CMFrsw_FI (Right Shoulder Width)	0.961
CMFrsw_PDO (Right Shoulder Width)	0.991
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.072
CMFdwc_mj_PDO (Major Commercial Driveway)	1.127
CMFdwc_mn_FI (Minor Driveway)	1.126
CMFdwc_mn_PDO (Minor Driveway)	1.039
CMFfo_FI (Roadside Fixed-Object)	1.006
CMFfo_PDO (Roadside Fixed-Object)	1.000
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.695		
Nbrmv (FI)	0.715		
Nbrmv (PDO)	1.980		
Nbrsv	0.354		
Nbrsv (FI)	0.117		
Nbrsv (PDO)	0.237		
Npedr	0.052		
Nbiker	0.034		
Nbr	3.049		
Nbr (FI)	0.832		
Nbr (PDO)	2.218		
Npredictedrs	3.135	6.220	155.968
Npredictedrs (FI)	0.917	1.820	45.634
Npredictedrs (PDO)	2.218	4.400	110.334

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	1.000	0.117	1.000	0.237
Total Single-Vehicle Crashes	1.000	0.117	1.000	0.237
Multiple-Vehicle				
Rear-End Collision	0.034	0.024	0.120	0.238
Head-On Collision	0.138	0.099	0.080	0.158
Angle Collision	0.241	0.172	0.180	0.356
Sideswipe Collision, Same Direction	0.103	0.074	0.060	0.119

Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.482	0.345	0.560	1.109
Total Multiple-Vehicle Crashes	0.998	0.714	1.000	1.980

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	29	crashes
Total Observed Crashes (MV, PDO)	50	crashes
Total Observed Crashes (SV, FI)	1	crashes
Total Observed Crashes (SV, PDO)	6	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	5.800		
Average Observed Crashes (MV, PDO)	10.000		
Average Observed Crashes (SV, FI)	0.200		
Average Observed Crashes (SV, PDO)	1.200		
Overdispersion Parameter (MV, FI), k	0.238		
Overdispersion Parameter (MV, PDO), k	0.169		
Overdispersion Parameter (SV, FI), k	0.604		
Overdispersion Parameter (SV, PDO), k	0.238		
Weighted Adjustment (MV, FI), w	0.855		
Weighted Adjustment (MV, PDO), w	0.749		
Weighted Adjustment (SV, FI), w	0.934		
Weighted Adjustment (SV, PDO), w	0.947		
Expected Crashes (MV, FI)	1.452		
Expected Crashes (MV, PDO)	3.993		
Expected Crashes (SV, FI)	0.122		
Expected Crashes (SV, PDO)	0.288		
Expected Crashes (FI)	1.574	3.123	78.311
Expected Crashes (PDO)	4.281	8.494	212.991
Total Expected Crashes	5.855	11.617	291.301

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$249,006.80
Annual Societal Crash Cost (PDO)	$31,679.40
Total Annual Societal Crash Cost	$280,686.20

Section 11: Coal & Girard

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	10926	veh/day
AADT MIN	5873	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	26	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	45

========== Output ==========

---------- SPF ----------

Nspfint	2.743
Nspfint (FI)	0.589
Nspfint (PDO)	2.154
Npedbase	0.014
Npedi	0.040
Nbikei	0.030

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	2.780
CMF2p (Schools)	1.000
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.014	
Npedi	0.040	
Nbikei	0.030	
Nbi	2.499	
Nbi (FI)	0.537	
Nbi (PDO)	1.962	
Npredictedint	2.569	0.419
Npredictedint (FI)	0.606	0.099
Npredictedint (PDO)	1.962	0.320

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.016	0.059	0.116
Head-On Collision	0.039	0.021	0.030	0.059
Angle Collision	0.837	0.449	0.733	1.438
Sideswipe	0.059	0.032	0.145	0.285
Other Multiple-Vehicle	0.029	0.016	0.012	0.024
Single-Vehicle Crashes	0.006	0.003	0.021	0.041

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	12	
Total Observed Crashes (PDO)	33	
Average Observed Crashes (FI)	2.400	
Average Observed Crashes (PDO)	6.600	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.553	
Weighted Adjustment (PDO), w	0.202	
Expected Crashes (FI)	1.408	0.230
Expected Crashes (PDO)	5.663	0.924
Total Expected Crashes	7.071	1.153

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$222,745.60
Annual Societal Crash Cost (PDO)	$41,906.20
Total Annual Societal Crash Cost	$264,651.80

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

Input

AADT	10581	veh/day
Length	0.495	mi
Illinois State	No	
Right Shoulder Width	6.0	ft
Number of Major Commercial Driveways	0	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	26	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	92	obj./mi

Observed Crashes

Number of Observed Crashes	60

Output

SPF

Nspfrsmv	2.204
Nspfrsmv (FI)	0.582
Nspfrsmv (PDO)	1.622
Nspfrssv	0.349
Nspfrssv (FI)	0.117
Nspfrssv (PDO)	0.232
Npedr	0.050
Nbiker	0.032

CMFs

CMFrsw_FI (Right Shoulder Width)	0.961
CMFrsw_PDO (Right Shoulder Width)	0.991
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	0.965
CMFdwc_mj_PDO (Major Commercial Driveway)	0.941
CMFdwc_mn_FI (Minor Driveway)	1.216
CMFdwc_mn_PDO (Minor Driveway)	1.066
CMFfo_FI (Roadside Fixed-Object)	1.920
CMFfo_PDO (Roadside Fixed-Object)	1.920
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.268		
Nbrmv (FI)	0.656		
Nbrmv (PDO)	1.612		
Nbrsv	0.657		
Nbrsv (FI)	0.216		
Nbrsv (PDO)	0.442		
Npedr	0.050		
Nbiker	0.032		
Nbr	2.925		
Nbr (FI)	0.872		
Nbr (PDO)	2.053		
Npredictedrs	3.007	6.075	157.292

Npredictedrs (FI)	0.954	1.927	49.883
Npredictedrs (PDO)	2.053	4.148	107.409

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	1.000	0.216	1.000	0.442
Total Single-Vehicle Crashes	1.000	0.216	1.000	0.442
Multiple-Vehicle				
Rear-End Collision	0.167	0.110	0.223	0.359
Head-On Collision	0.278	0.182	0.028	0.045
Angle Collision	0.223	0.146	0.279	0.450
Sideswipe Collision, Same Direction	0.056	0.037	0.000	0.000
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.278	0.182	0.473	0.762
Total Multiple-Vehicle Crashes	1.002	0.657	1.003	1.617

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	18	crashes
Total Observed Crashes (MV, PDO)	36	crashes
Total Observed Crashes (SV, FI)	1	crashes
Total Observed Crashes (SV, PDO)	5	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	3.600		
Average Observed Crashes (MV, PDO)	7.200		
Average Observed Crashes (SV, FI)	0.200		
Average Observed Crashes (SV, PDO)	1.000		
Overdispersion Parameter (MV, FI), k	0.242		
Overdispersion Parameter (MV, PDO), k	0.172		
Overdispersion Parameter (SV, FI), k	0.615		
Overdispersion Parameter (SV, PDO), k	0.242		
Weighted Adjustment (MV, FI), w	0.863		
Weighted Adjustment (MV, PDO), w	0.783		
Weighted Adjustment (SV, FI), w	0.883		
Weighted Adjustment (SV, PDO), w	0.903		
Expected Crashes (MV, FI)	1.059		
Expected Crashes (MV, PDO)	2.825		
Expected Crashes (SV, FI)	0.214		
Expected Crashes (SV, PDO)	0.496		
Expected Crashes (FI)	1.273	2.572	66.589
Expected Crashes (PDO)	3.321	6.709	173.718
Total Expected Crashes	4.594	9.281	240.307

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$201,388.60
Annual Societal Crash Cost (PDO)	$24,575.40
Total Annual Societal Crash Cost	$225,964.00

Section 13: Coal & Carlisle

Facility Type	Urban
Section Type	Intersection
Model Type	Four-leg, Signal (4SG)
Area Type	Urban

========== Input ==========

AADT MAJ	10581	veh/day

AADT MIN	6005	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	15	ped/day
Red Light Cameras	No	

---------- Observed Crashes ----------

Number of Observed Crashes	55

========== Output ==========

---------- SPF ----------

Nspfint	2.736
Nspfint (FI)	0.591
Nspfint (PDO)	2.145
Npedbase	0.012
Npedi	0.048
Nbikei	0.030

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.000
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.012	
Npedi	0.048	
Nbikei	0.030	
Nbi	2.492	
Nbi (FI)	0.538	
Nbi (PDO)	1.954	
Npredictedint	2.571	0.425
Npredictedint (FI)	0.616	0.102
Npredictedint (PDO)	1.954	0.323

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.016	0.059	0.115
Head-On Collision	0.039	0.021	0.030	0.059
Angle Collision	0.837	0.450	0.733	1.432
Sideswipe	0.059	0.032	0.145	0.283
Other Multiple-Vehicle	0.029	0.016	0.012	0.023
Single-Vehicle Crashes	0.006	0.003	0.021	0.041

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	19	
Total Observed Crashes (PDO)	36	
Average Observed Crashes (FI)	3.800	

Average Observed Crashes (PDO)	7.200	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.549	
Weighted Adjustment (PDO), w	0.202	
Expected Crashes (FI)	2.052	0.339
Expected Crashes (PDO)	6.140	1.014
Total Expected Crashes	8.192	1.353

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$324,626.40
Annual Societal Crash Cost (PDO)	$45,436.00
Total Annual Societal Crash Cost	$370,062.40

Section 14: Carlisle - Washington

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	8351	veh/day
Length	0.539	mi
Illinois State	No	
Right Shoulder Width	4.0	ft
Number of Major Commercial Driveways	5	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	20	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	68	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	75

========== Output ==========

---------- SPF ----------

Nspfrsmv	1.858
Nspfrsmv (FI)	0.471
Nspfrsmv (PDO)	1.387
Nspfrssv	0.344
Nspfrssv (FI)	0.115
Nspfrssv (PDO)	0.228
Npedr	0.051
Nbiker	0.033

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	1.000
CMFrsw_PDO (Right Shoulder Width)	1.000
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.137
CMFdwc_mj_PDO (Major Commercial Driveway)	1.247
CMFdwc_mn_FI (Minor Driveway)	1.133
CMFdwc_mn_PDO (Minor Driveway)	1.041
CMFfo_FI (Roadside Fixed-Object)	1.680
CMFfo_PDO (Roadside Fixed-Object)	1.680

CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.408		
Nbrmv (FI)	0.606		
Nbrmv (PDO)	1.801		
Nbrsv	0.578		
Nbrsv (FI)	0.194		
Nbrsv (PDO)	0.384		
Npedr	0.051		
Nbiker	0.033		
Nbr	2.986		
Nbr (FI)	0.800		
Nbr (PDO)	2.185		
Npredictedrs	3.069	5.694	186.808
Npredictedrs (FI)	0.884	1.640	53.795
Npredictedrs (PDO)	2.185	4.054	133.013

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	1.000	0.194	1.000	0.384
Total Single-Vehicle Crashes	1.000	0.194	1.000	0.384
Multiple-Vehicle				
Rear-End Collision	0.067	0.041	0.181	0.326
Head-On Collision	0.133	0.081	0.227	0.409
Angle Collision	0.267	0.162	0.091	0.164
Sideswipe Collision, Same Direction	0.067	0.041	0.136	0.245
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.467	0.283	0.364	0.656
Total Multiple-Vehicle Crashes	1.001	0.607	0.999	1.800

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	38	crashes
Total Observed Crashes (MV, PDO)	33	crashes
Total Observed Crashes (SV, FI)	1	crashes
Total Observed Crashes (SV, PDO)	3	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	7.600		
Average Observed Crashes (MV, PDO)	6.600		
Average Observed Crashes (SV, FI)	0.200		
Average Observed Crashes (SV, PDO)	0.600		
Overdispersion Parameter (MV, FI), k	0.223		
Overdispersion Parameter (MV, PDO), k	0.158		
Overdispersion Parameter (SV, FI), k	0.564		
Overdispersion Parameter (SV, PDO), k	0.223		
Weighted Adjustment (MV, FI), w	0.881		
Weighted Adjustment (MV, PDO), w	0.778		
Weighted Adjustment (SV, FI), w	0.901		
Weighted Adjustment (SV, PDO), w	0.921		
Expected Crashes (MV, FI)	1.438		
Expected Crashes (MV, PDO)	2.866		
Expected Crashes (SV, FI)	0.195		
Expected Crashes (SV, PDO)	0.401		
Expected Crashes (FI)	1.633	3.030	99.395
Expected Crashes (PDO)	3.267	6.061	198.852
Total Expected Crashes	4.900	9.091	298.247

---------- Economic Analysis ----------

**Based on Expected Crash Frequency

Annual Societal Crash Cost (FI)	$258,340.60
Annual Societal Crash Cost (PDO)	$24,175.80
Total Annual Societal Crash Cost	$282,516.40

This Highway Safety Software text report was created in HSS™ Version 2025 on 3/17/2025 16:15:27

Lead Avenue

Highway Safety Software Text Report

File Name:	Lead_CrashAnalysis_SL.xhz	
Analyst:	SM	
Agency:	Lee Engineering	
Jurisdiction:		
Date:	3/12/2025	
Analysis Year:	2025	
Project Description:		
Units:	U.S. Customary	

The total number of predicted crashes is:	42.298	crashes/year

Section 1: Washington-Carlisle

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

Input

AADT	8712	veh/day
Length	0.558	mi
Illinois State	No	
Right Shoulder Width	5.0	ft
Number of Major Commercial Driveways	5	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	18	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	86	obj./mi

Observed Crashes

Number of Observed Crashes	58

Output

SPF

Nspfrsmv	2.014
Nspfrsmv (FI)	0.514
Nspfrsmv (PDO)	1.500
Nspfrssv	0.362
Nspfrssv (FI)	0.122
Nspfrssv (PDO)	0.241
Npedr	0.054
Nbiker	0.035

CMFs

CMFrsw_FI (Right Shoulder Width)	0.980
CMFrsw_PDO (Right Shoulder Width)	0.995
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.131
CMFdwc_mj_PDO (Major Commercial Driveway)	1.235
CMFdwc_mn_FI (Minor Driveway)	1.108
CMFdwc_mn_PDO (Minor Driveway)	1.034
CMFfo_FI (Roadside Fixed-Object)	1.860
CMFfo_PDO (Roadside Fixed-Object)	1.860

CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.537		
Nbrmv (FI)	0.631		
Nbrmv (PDO)	1.906		
Nbrsv	0.667		
Nbrsv (FI)	0.222		
Nbrsv (PDO)	0.446		
Npedr	0.054		
Nbiker	0.035		
Nbr	3.204		
Nbr (FI)	0.853		
Nbr (PDO)	2.352		
Npredictedrs	3.294	5.903	185.638
Npredictedrs (FI)	0.942	1.689	53.109
Npredictedrs (PDO)	2.352	4.214	132.529

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.429	0.191
Other Single-Vehicle Collision	1.000	0.222	0.571	0.255
Total Single-Vehicle Crashes	1.000	0.222	1.000	0.446
Multiple-Vehicle				
Rear-End Collision	0.000	0.000	0.060	0.114
Head-On Collision	0.500	0.316	0.030	0.057
Angle Collision	0.071	0.045	0.333	0.635
Sideswipe Collision, Same Direction	0.000	0.000	0.030	0.057
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.030	0.057
Other Multiple-Vehicle Collision	0.429	0.271	0.517	0.985
Total Multiple-Vehicle Crashes	1.000	0.631	1.000	1.906

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	14	crashes
Total Observed Crashes (MV, PDO)	33	crashes
Total Observed Crashes (SV, FI)	4	crashes
Total Observed Crashes (SV, PDO)	7	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	2.800		
Average Observed Crashes (MV, PDO)	6.600		
Average Observed Crashes (SV, FI)	0.800		
Average Observed Crashes (SV, PDO)	1.400		
Overdispersion Parameter (MV, FI), k	0.215		
Overdispersion Parameter (MV, PDO), k	0.153		
Overdispersion Parameter (SV, FI), k	0.545		
Overdispersion Parameter (SV, PDO), k	0.215		
Weighted Adjustment (MV, FI), w	0.881		
Weighted Adjustment (MV, PDO), w	0.774		
Weighted Adjustment (SV, FI), w	0.892		
Weighted Adjustment (SV, PDO), w	0.913		
Expected Crashes (MV, FI)	0.889		
Expected Crashes (MV, PDO)	2.967		
Expected Crashes (SV, FI)	0.284		
Expected Crashes (SV, PDO)	0.529		
Expected Crashes (FI)	1.173	2.102	66.108
Expected Crashes (PDO)	3.496	6.265	197.027
Total Expected Crashes	4.669	8.367	263.135

---------- Economic Analysis ----------

**Based on Expected Crash Frequency		
Annual Societal Crash Cost (FI)	$185,568.60	
Annual Societal Crash Cost (PDO)	$25,870.40	
Total Annual Societal Crash Cost	$211,439.00	

Section 2: Lead & Carlisle

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

Input

AADT MAJ	8712	veh/day
AADT MIN	6773	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	43	ped/day
Red Light Cameras	No	

Observed Crashes

Number of Observed Crashes	21

Output

SPF

Nspfint	2.677
Nspfint (FI)	0.596
Nspfint (PDO)	2.081
Npedbase	0.020
Npedi	0.082
Nbikei	0.029

CMFs

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.000
CMF3p (Alcohol Sales)	1.000

Predicted Crashes

	crashes/year	crashes/million entering veh
Npedbase	0.020	
Npedi	0.082	
Nbikei	0.029	
Nbi	2.439	
Nbi (FI)	0.543	
Nbi (PDO)	1.896	
Npredictedint	2.550	0.451
Npredictedint (FI)	0.654	0.116
Npredictedint (PDO)	1.896	0.335

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.016	0.059	0.112
Head-On Collision	0.039	0.021	0.030	0.057
Angle Collision	0.837	0.455	0.733	1.389
Sideswipe	0.059	0.032	0.145	0.275
Other Multiple-Vehicle	0.029	0.016	0.012	0.023
Single-Vehicle Crashes	0.006	0.003	0.021	0.040

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	10	
Total Observed Crashes (PDO)	11	
Average Observed Crashes (FI)	2.000	
Average Observed Crashes (PDO)	2.200	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.534	
Weighted Adjustment (PDO), w	0.207	
Expected Crashes (FI)	1.281	0.227
Expected Crashes (PDO)	2.137	0.378
Total Expected Crashes	3.418	0.605

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$202,654.20
Annual Societal Crash Cost (PDO)	$15,813.80
Total Annual Societal Crash Cost	$218,468.00

Section 3: Carlisle-Girard

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	10086	veh/day
Length	0.496	mi
Illinois State	No	
Right Shoulder Width	5.0	ft
Number of Major Commercial Driveways	0	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	21	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	80	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	53

========== Output ==========

---------- SPF ----------

Nspfrsmv	2.097
Nspfrsmv (FI)	0.549
Nspfrsmv (PDO)	1.548
Nspfrssv	0.343

Nspfrssv (FI)	0.115
Nspfrssv (PDO)	0.228
Npedr	0.047
Nbiker	0.030

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	0.980
CMFrsw_PDO (Right Shoulder Width)	0.995
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	0.965
CMFdwc_mj_PDO (Major Commercial Driveway)	0.941
CMFdwc_mn_FI (Minor Driveway)	1.160
CMFdwc_mn_PDO (Minor Driveway)	1.050
CMFfo_FI (Roadside Fixed-Object)	1.800
CMFfo_PDO (Roadside Fixed-Object)	1.800
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.125		
Nbrmv (FI)	0.603		
Nbrmv (PDO)	1.522		
Nbrsv	0.611		
Nbrsv (FI)	0.203		
Nbrsv (PDO)	0.408		
Npedr	0.047		
Nbiker	0.030		
Nbr	2.735		
Nbr (FI)	0.805		
Nbr (PDO)	1.930		
Npredictedrs	2.812	5.669	154.003
Npredictedrs (FI)	0.882	1.778	48.295
Npredictedrs (PDO)	1.930	3.892	105.708

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	1.000	0.203	1.000	0.408
Total Single-Vehicle Crashes	1.000	0.203	1.000	0.408
Multiple-Vehicle				
Rear-End Collision	0.000	0.000	0.058	0.088
Head-On Collision	0.143	0.086	0.114	0.173
Angle Collision	0.142	0.086	0.201	0.306
Sideswipe Collision, Same Direction	0.214	0.129	0.029	0.044
Sideswipe Collision, Opposite Dir.	0.071	0.043	0.000	0.000
Other Multiple-Vehicle Collision	0.429	0.259	0.601	0.915
Total Multiple-Vehicle Crashes	0.999	0.602	1.003	1.526

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	14	crashes
Total Observed Crashes (MV, PDO)	35	crashes
Total Observed Crashes (SV, FI)	3	crashes
Total Observed Crashes (SV, PDO)	1	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	2.800		
Average Observed Crashes (MV, PDO)	7.000		

Average Observed Crashes (SV, FI)	0.600		
Average Observed Crashes (SV, PDO)	0.200		
Overdispersion Parameter (MV, FI), k	0.242		
Overdispersion Parameter (MV, PDO), k	0.172		
Overdispersion Parameter (SV, FI), k	0.613		
Overdispersion Parameter (SV, PDO), k	0.242		
Weighted Adjustment (MV, FI), w	0.873		
Weighted Adjustment (MV, PDO), w	0.793		
Weighted Adjustment (SV, FI), w	0.889		
Weighted Adjustment (SV, PDO), w	0.910		
Expected Crashes (MV, FI)	0.882		
Expected Crashes (MV, PDO)	2.656		
Expected Crashes (SV, FI)	0.247		
Expected Crashes (SV, PDO)	0.389		
Expected Crashes (FI)	1.129	2.276	61.830
Expected Crashes (PDO)	3.045	6.139	166.761
Total Expected Crashes	4.174	8.415	228.591

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$178,607.80
Annual Societal Crash Cost (PDO)	$22,533.00
Total Annual Societal Crash Cost	$201,140.80

Section 4: Lead & Girard

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	10086	veh/day
AADT MIN	6776	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	23	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	0

========== Output ==========

---------- SPF ----------

Nspfint	2.813
Nspfint (FI)	0.612
Nspfint (PDO)	2.200
Npedbase	0.014
Npedi	0.040
Nbikei	0.031

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000

CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	2.780
CMF2p (Schools)	1.000
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.014	
Npedi	0.040	
Nbikei	0.031	
Nbi	2.563	
Nbi (FI)	0.558	
Nbi (PDO)	2.005	
Npredictedint	2.633	0.428
Npredictedint (FI)	0.628	0.102
Npredictedint (PDO)	2.005	0.326

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.017	0.059	0.118
Head-On Collision	0.039	0.022	0.030	0.060
Angle Collision	0.837	0.467	0.733	1.469
Sideswipe	0.059	0.033	0.145	0.291
Other Multiple-Vehicle	0.029	0.016	0.012	0.024
Single-Vehicle Crashes	0.006	0.003	0.021	0.042

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	0	
Total Observed Crashes (PDO)	0	
Average Observed Crashes (FI)	0.000	
Average Observed Crashes (PDO)	0.000	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.545	
Weighted Adjustment (PDO), w	0.198	
Expected Crashes (FI)	0.342	0.056
Expected Crashes (PDO)	0.397	0.065
Total Expected Crashes	0.739	0.120

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$54,104.40
Annual Societal Crash Cost (PDO)	$2,937.80
Total Annual Societal Crash Cost	$57,042.20

Section 5: Girard-Yale

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	11669	veh/day
Length	0.498	mi
Illinois State	No	
Right Shoulder Width	5.0	ft
Parking Type - Right	ParallelParking	
Curb Length Right On-Street Parking	0.02	mi

Number of Major Commercial Driveways	2	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	24	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	96	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	104

========== Output ==========

---------- SPF ----------

Nspfrsmv	2.465
Nspfrsmv (FI)	0.662
Nspfrsmv (PDO)	1.803
Nspfrssv	0.366
Nspfrssv (FI)	0.123
Nspfrssv (PDO)	0.243
Npedr	0.060
Nbiker	0.039

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	0.980
CMFrsw_PDO (Right Shoulder Width)	0.995
CMFpk_par_FI (On-Street Parallel Parking)	1.002
CMFpk_par_PDO (On-Street Parallel Parking)	1.005
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.036
CMFdwc_mj_PDO (Major Commercial Driveway)	1.063
CMFdwc_mn_FI (Minor Driveway)	1.192
CMFdwc_mn_PDO (Minor Driveway)	1.059
CMFfo_FI (Roadside Fixed-Object)	1.960
CMFfo_PDO (Roadside Fixed-Object)	1.960
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.834		
Nbrmv (FI)	0.803		
Nbrmv (PDO)	2.030		
Nbrsv	0.710		
Nbrsv (FI)	0.235		
Nbrsv (PDO)	0.475		
Npedr	0.060		
Nbiker	0.039		
Nbr	3.544		
Nbr (FI)	1.039		
Nbr (PDO)	2.505		
Npredictedrs	3.643	7.316	171.772
Npredictedrs (FI)	1.138	2.285	53.649
Npredictedrs (PDO)	2.505	5.031	118.123

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.333	0.078	0.000	0.000
Other Single-Vehicle Collision	0.667	0.157	1.000	0.475
Total Single-Vehicle Crashes	1.000	0.235	1.000	0.475

Multiple-Vehicle				
Rear-End Collision	0.058	0.047	0.032	0.065
Head-On Collision	0.115	0.092	0.191	0.388
Angle Collision	0.229	0.184	0.190	0.386
Sideswipe Collision, Same Direction	0.000	0.000	0.048	0.097
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.600	0.482	0.540	1.096
Total Multiple-Vehicle Crashes	1.002	0.805	1.001	2.033

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	35	crashes
Total Observed Crashes (MV, PDO)	63	crashes
Total Observed Crashes (SV, FI)	3	crashes
Total Observed Crashes (SV, PDO)	3	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	7.000		
Average Observed Crashes (MV, PDO)	12.600		
Average Observed Crashes (SV, FI)	0.600		
Average Observed Crashes (SV, PDO)	0.600		
Overdispersion Parameter (MV, FI), k	0.241		
Overdispersion Parameter (MV, PDO), k	0.171		
Overdispersion Parameter (SV, FI), k	0.611		
Overdispersion Parameter (SV, PDO), k	0.241		
Weighted Adjustment (MV, FI), w	0.838		
Weighted Adjustment (MV, PDO), w	0.742		
Weighted Adjustment (SV, FI), w	0.874		
Weighted Adjustment (SV, PDO), w	0.897		
Expected Crashes (MV, FI)	1.807		
Expected Crashes (MV, PDO)	4.757		
Expected Crashes (SV, FI)	0.281		
Expected Crashes (SV, PDO)	0.488		
Expected Crashes (FI)	2.088	4.193	98.441
Expected Crashes (PDO)	5.245	10.532	247.280
Total Expected Crashes	7.333	14.725	345.721

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$330,321.60
Annual Societal Crash Cost (PDO)	$38,813.00
Total Annual Societal Crash Cost	$369,134.60

Section 6: Lead & Yale

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	11669	veh/day
AADT MIN	5992	veh/day
Method Type	One-Way	
Number of Lanes MAJ	4	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	527	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	48

========== Output ==========

---------- SPF ----------

Nspfint	2.826
Nspfint (FI)	0.601
Nspfint (PDO)	2.225
Npedbase	0.058
Npedi	0.268
Nbikei	0.036

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.411
CMFlanes_PDO (Number of Lanes)	1.098
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.000
CMF3p (Alcohol Sales)	1.120

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.058	
Npedi	0.268	
Nbikei	0.036	
Nbi	2.998	
Nbi (FI)	0.773	
Nbi (PDO)	2.225	
Npredictedint	3.302	0.512
Npredictedint (FI)	1.077	0.167
Npredictedint (PDO)	2.225	0.345

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.023	0.059	0.131
Head-On Collision	0.039	0.030	0.030	0.067
Angle Collision	0.837	0.647	0.733	1.631
Sideswipe	0.059	0.046	0.145	0.323
Other Multiple-Vehicle	0.029	0.022	0.012	0.027
Single-Vehicle Crashes	0.006	0.005	0.021	0.047

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	17	
Total Observed Crashes (PDO)	31	
Average Observed Crashes (FI)	3.400	
Average Observed Crashes (PDO)	6.200	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.411	
Weighted Adjustment (PDO), w	0.182	
Expected Crashes (FI)	2.445	0.379
Expected Crashes (PDO)	5.477	0.850
Total Expected Crashes	7.922	1.229

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$386,799.00

Annual Societal Crash Cost (PDO)	$40,529.80
Total Annual Societal Crash Cost	$427,328.80

Section 7: Yale-University

Facility Type	Urban
Section Type	Segment
Model Type	Two-lane One-way Arterials (2O)
Area Type	Urban

Input

AADT	9434	veh/day
Length	0.306	mi
Illinois State	No	
Right Shoulder Width	5.0	ft
Parking Type - Left	ParallelParking	
Curb Length Left On-Street Parking	0.09	mi
Parking Type - Right	ParallelParking	
Curb Length Right On-Street Parking	0.06	mi
Number of Major Commercial Driveways	1	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	30	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	94	obj./mi

Observed Crashes

Number of Observed Crashes	24

Output

SPF

Nspfrsmv	1.203
Nspfrsmv (FI)	0.311
Nspfrsmv (PDO)	0.892
Nspfrssv	0.206
Nspfrssv (FI)	0.069
Nspfrssv (PDO)	0.137
Npedr	0.034
Nbiker	0.022

CMFs

CMFrsw_FI (Right Shoulder Width)	0.980
CMFrsw_PDO (Right Shoulder Width)	0.995
CMFpk_par_FI (On-Street Parallel Parking)	1.027
CMFpk_par_PDO (On-Street Parallel Parking)	1.063
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.023
CMFdwc_mj_PDO (Major Commercial Driveway)	1.039
CMFdwc_mn_FI (Minor Driveway)	1.499
CMFdwc_mn_PDO (Minor Driveway)	1.141
CMFfo_FI (Roadside Fixed-Object)	1.940
CMFfo_PDO (Roadside Fixed-Object)	1.940
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	1.600		
Nbrmv (FI)	0.481		
Nbrmv (PDO)	1.120		

Nbrsv	0.395		
Nbrsv (FI)	0.131		
Nbrsv (PDO)	0.264		
Npedr	0.034		
Nbiker	0.022		
Nbr	1.995		
Nbr (FI)	0.612		
Nbr (PDO)	1.383		
Npredictedrs	2.051	6.703	194.654
Npredictedrs (FI)	0.668	2.182	63.366
Npredictedrs (PDO)	1.383	4.521	131.288

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	1.000	0.131	0.000	0.000
Total Single-Vehicle Crashes	1.000	0.131	0.000	0.000
Multiple-Vehicle				
Rear-End Collision	0.000	0.000	0.125	0.140
Head-On Collision	0.000	0.000	0.250	0.280
Angle Collision	0.000	0.000	0.062	0.069
Sideswipe Collision, Same Direction	0.167	0.080	0.125	0.140
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.834	0.401	0.436	0.488
Total Multiple-Vehicle Crashes	1.001	0.481	0.998	1.117

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	6	crashes
Total Observed Crashes (MV, PDO)	16	crashes
Total Observed Crashes (SV, FI)	2	crashes
Total Observed Crashes (SV, PDO)	0	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	1.200		
Average Observed Crashes (MV, PDO)	3.200		
Average Observed Crashes (SV, FI)	0.400		
Average Observed Crashes (SV, PDO)	0.000		
Overdispersion Parameter (MV, FI), k	0.392		
Overdispersion Parameter (MV, PDO), k	0.278		
Overdispersion Parameter (SV, FI), k	0.994		
Overdispersion Parameter (SV, PDO), k	0.392		
Weighted Adjustment (MV, FI), w	0.841		
Weighted Adjustment (MV, PDO), w	0.763		
Weighted Adjustment (SV, FI), w	0.885		
Weighted Adjustment (SV, PDO), w	0.906		
Expected Crashes (MV, FI)	0.595		
Expected Crashes (MV, PDO)	1.613		
Expected Crashes (SV, FI)	0.162		
Expected Crashes (SV, PDO)	0.239		
Expected Crashes (FI)	0.757	2.474	71.843
Expected Crashes (PDO)	1.852	6.052	175.764
Total Expected Crashes	2.609	8.526	247.608

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$119,757.40
Annual Societal Crash Cost (PDO)	$13,704.80
Total Annual Societal Crash Cost	$133,462.20

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	9434	veh/day
AADT MIN	10837	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	6	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	453	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	55

========== Output ==========

---------- SPF ----------

Nspfint	3.263
Nspfint (FI)	0.720
Nspfint (PDO)	2.543
Npedbase	0.077
Npedi	0.430
Nbikei	0.047

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.873
CMFlanes_PDO (Number of Lanes)	1.170
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.077	
Npedi	0.430	
Nbikei	0.047	
Nbi	3.939	
Nbi (FI)	1.229	
Nbi (PDO)	2.710	
Npredictedint	4.417	0.597
Npredictedint (FI)	1.707	0.231
Npredictedint (PDO)	2.710	0.366

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.037	0.059	0.160
Head-On Collision	0.039	0.048	0.030	0.081
Angle Collision	0.837	1.029	0.733	1.986
Sideswipe	0.059	0.073	0.145	0.393
Other Multiple-Vehicle	0.029	0.036	0.012	0.033
Single-Vehicle Crashes	0.006	0.007	0.021	0.057

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	23	
Total Observed Crashes (PDO)	32	
Average Observed Crashes (FI)	4.600	
Average Observed Crashes (PDO)	6.400	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.305	
Weighted Adjustment (PDO), w	0.155	
Expected Crashes (FI)	3.718	0.503
Expected Crashes (PDO)	5.828	0.788
Total Expected Crashes	9.546	1.290

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$588,187.60
Annual Societal Crash Cost (PDO)	$43,127.20
Total Annual Societal Crash Cost	$631,314.80

Section 9: University-Oak

Facility Type	Urban	
Section Type	Segment	
Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

========== Input ==========

AADT	12223	veh/day
Length	0.545	mi
Illinois State	No	
Right Shoulder Width	4.0	ft
Parking Type - Left	ParallelParking	
Curb Length Left On-Street Parking	0.12	mi
Parking Type - Right	ParallelParking	
Curb Length Right On-Street Parking	0.15	mi
Number of Major Commercial Driveways	2	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	26	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	57	ft
Fixed-Object Density	0	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	92

========== Output ==========

---------- SPF ----------

Nspfrsmv	2.836
Nspfrsmv (FI)	0.768
Nspfrsmv (PDO)	2.069
Nspfrssv	0.409
Nspfrssv (FI)	0.137
Nspfrssv (PDO)	0.272
Npedr	0.065
Nbiker	0.042

---------- CMFs ----------

CMFrsw_FI (Right Shoulder Width)	1.000
CMFrsw_PDO (Right Shoulder Width)	1.000
CMFpk_par_FI (On-Street Parallel Parking)	1.028
CMFpk_par_PDO (On-Street Parallel Parking)	1.064
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.030
CMFdwc_mj_PDO (Major Commercial Driveway)	1.052
CMFdwc_mn_FI (Minor Driveway)	1.189
CMFdwc_mn_PDO (Minor Driveway)	1.058
CMFfo_FI (Roadside Fixed-Object)	1.000
CMFfo_PDO (Roadside Fixed-Object)	1.000
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	3.417		
Nbrmv (FI)	0.967		
Nbrmv (PDO)	2.450		
Nbrsv	0.409		
Nbrsv (FI)	0.137		
Nbrsv (PDO)	0.272		
Npedr	0.065		
Nbiker	0.042		
Nbr	3.825		
Nbr (FI)	1.103		
Nbr (PDO)	2.722		
Npredictedrs	3.932	7.216	161.733
Npredictedrs (FI)	1.211	2.221	49.786
Npredictedrs (PDO)	2.722	4.994	111.947

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.333	0.091
Other Single-Vehicle Collision	1.000	0.137	0.667	0.181
Total Single-Vehicle Crashes	1.000	0.137	1.000	0.272
Multiple-Vehicle				
Rear-End Collision	0.280	0.271	0.187	0.458
Head-On Collision	0.240	0.232	0.119	0.292
Angle Collision	0.080	0.077	0.153	0.375
Sideswipe Collision, Same Direction	0.040	0.039	0.017	0.042
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.360	0.348	0.525	1.286
Total Multiple-Vehicle Crashes	1.000	0.967	1.001	2.453

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	25	crashes
Total Observed Crashes (MV, PDO)	59	crashes
Total Observed Crashes (SV, FI)	5	crashes
Total Observed Crashes (SV, PDO)	3	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	5.000		
Average Observed Crashes (MV, PDO)	11.800		
Average Observed Crashes (SV, FI)	1.000		
Average Observed Crashes (SV, PDO)	0.600		
Overdispersion Parameter (MV, FI), k	0.220		
Overdispersion Parameter (MV, PDO), k	0.156		
Overdispersion Parameter (SV, FI), k	0.558		
Overdispersion Parameter (SV, PDO), k	0.220		
Weighted Adjustment (MV, FI), w	0.825		

Weighted Adjustment (MV, PDO), w	0.723		
Weighted Adjustment (SV, FI), w	0.929		
Weighted Adjustment (SV, PDO), w	0.944		
Expected Crashes (MV, FI)	1.673		
Expected Crashes (MV, PDO)	5.040		
Expected Crashes (SV, FI)	0.198		
Expected Crashes (SV, PDO)	0.290		
Expected Crashes (FI)	1.871	3.433	76.950
Expected Crashes (PDO)	5.330	9.780	219.210
Total Expected Crashes	7.201	13.213	296.159

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$295,992.20
Annual Societal Crash Cost (PDO)	$39,442.00
Total Annual Societal Crash Cost	$335,434.20

Section 10: Lead and Oak

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	12223	veh/day
AADT MIN	8310	veh/day
Method Type	One-Way	
Number of Lanes MAJ	3	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	363	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	63

========== Output ==========

---------- SPF ----------

Nspfint	3.234
Nspfint (FI)	0.685
Nspfint (PDO)	2.549
Npedbase	0.058
Npedi	0.218
Nbikei	0.038

---------- CMFs ----------

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.163
CMFlanes_PDO (Number of Lanes)	1.043
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	2.780
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.058	
Npedi	0.218	
Nbikei	0.038	
Nbi	3.147	
Nbi (FI)	0.725	
Nbi (PDO)	2.422	
Npredictedint	3.403	0.454
Npredictedint (FI)	0.981	0.131
Npredictedint (PDO)	2.422	0.323

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.022	0.059	0.143
Head-On Collision	0.039	0.028	0.030	0.073
Angle Collision	0.837	0.607	0.733	1.775
Sideswipe	0.059	0.043	0.145	0.351
Other Multiple-Vehicle	0.029	0.021	0.012	0.029
Single-Vehicle Crashes	0.006	0.004	0.021	0.051

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	23	
Total Observed Crashes (PDO)	40	
Average Observed Crashes (FI)	4.600	
Average Observed Crashes (PDO)	8.000	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.434	
Weighted Adjustment (PDO), w	0.170	
Expected Crashes (FI)	3.029	0.404
Expected Crashes (PDO)	7.052	0.941
Total Expected Crashes	10.081	1.345

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$479,187.80
Annual Societal Crash Cost (PDO)	$52,184.80
Total Annual Societal Crash Cost	$531,372.60

Section 11: Oak-Locust

Facility Type	Urban
Section Type	Segment
Model Type	Two-lane One-way Arterials (2O)
Area Type	Urban

========== Input ==========

AADT	8070	veh/day
Length	0.066	mi
Illinois State	No	
Right Shoulder Width	5.0	ft
Number of Major Commercial Driveways	0	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	0	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	59	obj./mi

----------Observed Crashes----------

Number of Observed Crashes	8

Output

SPF

Nspfrsmv	0.219
Nspfrsmv (FI)	0.055
Nspfrsmv (PDO)	0.164
Nspfrssv	0.041
Nspfrssv (FI)	0.014
Nspfrssv (PDO)	0.028
Npedr	0.005
Nbiker	0.003

CMFs

CMFrsw_FI (Right Shoulder Width)	0.980
CMFrsw_PDO (Right Shoulder Width)	0.995
CMFpk_par_FI (On-Street Parallel Parking)	1.000
CMFpk_par_PDO (On-Street Parallel Parking)	1.000
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	0.965
CMFdwc_mj_PDO (Major Commercial Driveway)	0.941
CMFdwc_mn_FI (Minor Driveway)	0.955
CMFdwc_mn_PDO (Minor Driveway)	0.985
CMFfo_FI (Roadside Fixed-Object)	1.590
CMFfo_PDO (Roadside Fixed-Object)	1.590
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	0.201		
Nbrmv (FI)	0.050		
Nbrmv (PDO)	0.151		
Nbrsv	0.065		
Nbrsv (FI)	0.022		
Nbrsv (PDO)	0.044		
Npedr	0.005		
Nbiker	0.003		
Nbr	0.267		
Nbr (FI)	0.072		
Nbr (PDO)	0.195		
Npredictedrs	0.274	4.153	140.983
Npredictedrs (FI)	0.079	1.198	40.658
Npredictedrs (PDO)	0.195	2.955	100.325

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.000	0.000	0.000	0.000
Other Single-Vehicle Collision	0.000	0.000	1.000	0.044
Total Single-Vehicle Crashes	0.000	0.000	1.000	0.044
Multiple-Vehicle				
Rear-End Collision	0.000	0.000	0.286	0.043
Head-On Collision	0.000	0.000	0.143	0.022
Angle Collision	0.000	0.000	0.429	0.065
Sideswipe Collision, Same Direction	0.000	0.000	0.000	0.000
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.000	0.000	0.143	0.022
Total Multiple-Vehicle Crashes	0.000	0.000	1.001	0.152

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	0		crashes
Total Observed Crashes (MV, PDO)	7		crashes
Total Observed Crashes (SV, FI)	0		crashes
Total Observed Crashes (SV, PDO)	1		crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	0.000		
Average Observed Crashes (MV, PDO)	1.400		
Average Observed Crashes (SV, FI)	0.000		
Average Observed Crashes (SV, PDO)	0.200		
Overdispersion Parameter (MV, FI), k	1.818		
Overdispersion Parameter (MV, PDO), k	1.290		
Overdispersion Parameter (SV, FI), k	4.609		
Overdispersion Parameter (SV, PDO), k	1.818		
Weighted Adjustment (MV, FI), w	0.917		
Weighted Adjustment (MV, PDO), w	0.837		
Weighted Adjustment (SV, FI), w	0.908		
Weighted Adjustment (SV, PDO), w	0.926		
Expected Crashes (MV, FI)	0.046		
Expected Crashes (MV, PDO)	0.355		
Expected Crashes (SV, FI)	0.020		
Expected Crashes (SV, PDO)	0.056		
Expected Crashes (FI)	0.066	1.000	33.950
Expected Crashes (PDO)	0.411	6.227	211.413
Total Expected Crashes	0.477	7.227	245.362

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$10,441.20
Annual Societal Crash Cost (PDO)	$3,041.40
Total Annual Societal Crash Cost	$13,482.60

Section 12: Lead and Locust

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	8070	veh/day
AADT MIN	11486	veh/day
Method Type	One-Way	
Number of Lanes MAJ	2	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	No	
Pedestrian Volume	340	ped/day
Red Light Cameras	No	

----------Observed Crashes----------

Number of Observed Crashes	39

========== Output ==========

---------- SPF ----------

Nspfint	3.162
Nspfint (FI)	0.715
Nspfint (PDO)	2.447

Npedbase	0.054
Npedi	0.300
Nbikei	0.038

---------- CMFs ----------

CMFlg_FI (Lighting)	1.000
CMFlg_PDO (Lighting)	1.000
CMFlanes_FI (Number of Lanes)	1.000
CMFlanes_PDO (Number of Lanes)	1.000
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

---------- Predicted Crashes ----------

	crashes/year	crashes/million entering veh
Npedbase	0.054	
Npedi	0.300	
Nbikei	0.038	
Nbi	3.162	
Nbi (FI)	0.715	
Nbi (PDO)	2.447	
Npredictedint	3.500	0.490
Npredictedint (FI)	1.054	0.148
Npredictedint (PDO)	2.447	0.343

---------- Crashes by Severity Level and Collision Type ----------

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.021	0.059	0.144
Head-On Collision	0.039	0.028	0.030	0.073
Angle Collision	0.837	0.599	0.733	1.793
Sideswipe	0.059	0.042	0.145	0.355
Other Multiple-Vehicle	0.029	0.021	0.012	0.029
Single-Vehicle Crashes	0.006	0.004	0.021	0.051

---------- Expected Crashes ----------

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	19	
Total Observed Crashes (PDO)	20	
Average Observed Crashes (FI)	3.800	
Average Observed Crashes (PDO)	4.000	
Overdispersion Parameter (FI), k	1.332	
Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.416	
Weighted Adjustment (PDO), w	0.169	
Expected Crashes (FI)	2.658	0.372
Expected Crashes (PDO)	3.738	0.524
Total Expected Crashes	6.396	0.896

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$420,495.60
Annual Societal Crash Cost (PDO)	$27,661.20
Total Annual Societal Crash Cost	$448,156.80

Section 13: Locust-Broadway

Facility Type	Urban
Section Type	Segment

Model Type	Two-lane One-way Arterials (2O)	
Area Type	Urban	

Input

AADT	9874	veh/day
Length	0.410	mi
Illinois State	No	
Right Shoulder Width	4.0	ft
Parking Type - Left	ParallelParking	
Curb Length Left On-Street Parking	0.16	mi
Number of Major Commercial Driveways	1	
Number of Major Industrial Driveways	0	
Number of Minor Driveways	33	
Roadside Fixed Objects	Yes	
Fixed-Object Offset	0	ft
Fixed-Object Density	88	obj./mi

Observed Crashes

Number of Observed Crashes	69

Output

SPF

Nspfrsmv	1.694
Nspfrsmv (FI)	0.442
Nspfrsmv (PDO)	1.252
Nspfrssv	0.281
Nspfrssv (FI)	0.094
Nspfrssv (PDO)	0.187
Npedr	0.045
Nbiker	0.029

CMFs

CMFrsw_FI (Right Shoulder Width)	1.000
CMFrsw_PDO (Right Shoulder Width)	1.000
CMFpk_par_FI (On-Street Parallel Parking)	1.022
CMFpk_par_PDO (On-Street Parallel Parking)	1.050
CMFpk_ang_FI (On-Street Angle Parking)	1.000
CMFpk_ang_PDO (On-Street Angle Parking)	1.000
CMFdwc_mj_FI (Major Commercial Driveway)	1.008
CMFdwc_mj_PDO (Major Commercial Driveway)	1.013
CMFdwc_mn_FI (Minor Driveway)	1.383
CMFdwc_mn_PDO (Minor Driveway)	1.112
CMFfo_FI (Roadside Fixed-Object)	1.880
CMFfo_PDO (Roadside Fixed-Object)	1.880
CMFase_FI (Automated Speed Enforcement)	1.000
CMFase_PDO (Automated Speed Enforcement)	1.000

Predicted Crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Nbrmv	2.111		
Nbrmv (FI)	0.629		
Nbrmv (PDO)	1.481		
Nbrsv	0.528		
Nbrsv (FI)	0.177		
Nbrsv (PDO)	0.351		
Npedr	0.045		
Nbiker	0.029		
Nbr	2.638		
Nbr (FI)	0.806		
Nbr (PDO)	1.832		
Npredictedrs	2.712	6.615	183.559
Npredictedrs (FI)	0.880	2.146	59.556
Npredictedrs (PDO)	1.832	4.469	124.003

---------- Crashes by Severity Level and Collision Type ----------

Collision Type	Fatal-and-Injury Prop.	Fatal-and-Injury N	Property-Damage-Only Prop.	Property-Damage-Only N
Single-Vehicle				
Collision with Fixed Object - Left	0.000	0.000	0.000	0.000
Collision with Fixed Object - Right	0.000	0.000	0.000	0.000
Collision with Other Object	0.143	0.025	0.000	0.000
Other Single-Vehicle Collision	0.858	0.152	1.000	0.351
Total Single-Vehicle Crashes	1.001	0.177	1.000	0.351
Multiple-Vehicle				
Rear-End Collision	0.167	0.105	0.000	0.000
Head-On Collision	0.056	0.035	0.095	0.141
Angle Collision	0.111	0.070	0.239	0.354
Sideswipe Collision, Same Direction	0.000	0.000	0.095	0.141
Sideswipe Collision, Opposite Dir.	0.000	0.000	0.000	0.000
Other Multiple-Vehicle Collision	0.668	0.420	0.572	0.847
Total Multiple-Vehicle Crashes	1.002	0.630	1.001	1.483

---------- Expected Crashes ----------

Total Observed Crashes (MV, FI)	18	crashes
Total Observed Crashes (MV, PDO)	42	crashes
Total Observed Crashes (SV, FI)	7	crashes
Total Observed Crashes (SV, PDO)	2	crashes

	crashes/year	crashes/mi/year	crashes/100M VMT
Average Observed Crashes (MV, FI)	3.600		
Average Observed Crashes (MV, PDO)	8.400		
Average Observed Crashes (SV, FI)	1.400		
Average Observed Crashes (SV, PDO)	0.400		
Overdispersion Parameter (MV, FI), k	0.293		
Overdispersion Parameter (MV, PDO), k	0.208		
Overdispersion Parameter (SV, FI), k	0.742		
Overdispersion Parameter (SV, PDO), k	0.293		
Weighted Adjustment (MV, FI), w	0.844		
Weighted Adjustment (MV, PDO), w	0.764		
Weighted Adjustment (SV, FI), w	0.884		
Weighted Adjustment (SV, PDO), w	0.907		
Expected Crashes (MV, FI)	1.092		
Expected Crashes (MV, PDO)	3.114		
Expected Crashes (SV, FI)	0.319		
Expected Crashes (SV, PDO)	0.356		
Expected Crashes (FI)	1.411	3.441	95.490
Expected Crashes (PDO)	3.470	8.463	234.833
Total Expected Crashes	4.881	11.905	330.323

---------- Economic Analysis ----------

**Based on Expected Crash Frequency	
Annual Societal Crash Cost (FI)	$223,220.20
Annual Societal Crash Cost (PDO)	$25,678.00
Total Annual Societal Crash Cost	$248,898.20

Section 14: Lead & Broadway

Facility Type	Urban	
Section Type	Intersection	
Model Type	Four-leg, Signal (4SG)	
Area Type	Urban	

========== Input ==========

AADT MAJ	9874	veh/day
AADT MIN	11774	veh/day
Method Type	One-Way	

Number of Lanes MAJ	4	
Number of Lanes MIN	2	
One-Way on Minor-Street Indicator	No	
Illinois State	No	
Lighting	Yes	
Pedestrian Volume	176	ped/day
Red Light Cameras	No	

Observed Crashes

Number of Observed Crashes	62

Output

SPF

Nspfint	3.415
Nspfint (FI)	0.749
Nspfint (PDO)	2.666
Npedbase	0.047
Npedi	0.264
Nbikei	0.042

CMFs

CMFlg_FI (Lighting)	0.911
CMFlg_PDO (Lighting)	0.911
CMFlanes_FI (Number of Lanes)	1.284
CMFlanes_PDO (Number of Lanes)	1.067
CMFrlc_FI (Red-Light Cameras)	1.000
CMFrlc_PDO (Red-Light Cameras)	1.000
CMF1p (Bus Stops)	4.150
CMF2p (Schools)	1.350
CMF3p (Alcohol Sales)	1.000

Predicted Crashes

	crashes/year	crashes/million entering veh
Npedbase	0.047	
Npedi	0.264	
Nbikei	0.042	
Nbi	3.468	
Nbi (FI)	0.876	
Nbi (PDO)	2.591	
Npredictedint	3.773	0.478
Npredictedint (FI)	1.182	0.150
Npredictedint (PDO)	2.591	0.328

Crashes by Severity Level and Collision Type

	Fatal-and-Injury		Property-Damage-Only	
Collision Type	Prop.	N	Prop.	N
Rear-End Collision	0.030	0.026	0.059	0.153
Head-On Collision	0.039	0.034	0.030	0.078
Angle Collision	0.837	0.734	0.733	1.900
Sideswipe	0.059	0.052	0.145	0.376
Other Multiple-Vehicle	0.029	0.025	0.012	0.031
Single-Vehicle Crashes	0.006	0.005	0.021	0.054

Expected Crashes

	crashes/year	crashes/million entering veh
Total Observed Crashes (FI)	28	
Total Observed Crashes (PDO)	34	
Average Observed Crashes (FI)	5.600	
Average Observed Crashes (PDO)	6.800	
Overdispersion Parameter (FI), k	1.332	

Overdispersion Parameter (PDO), k	2.016	
Weighted Adjustment (FI), w	0.388	
Weighted Adjustment (PDO), w	0.161	
Expected Crashes (FI)	3.886	0.492
Expected Crashes (PDO)	6.122	0.775
Total Expected Crashes	10.008	1.267

---------- Economic Analysis ----------

**Based on Expected Crash Frequency

Annual Societal Crash Cost (FI)	$614,765.20
Annual Societal Crash Cost (PDO)	$45,302.80
Total Annual Societal Crash Cost	$660,068.00

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