

November 6, 2025

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Re: Lomas Blvd Road Diet Study

INTRODUCTION

STUDY PURPOSE

This feasibility study evaluates the potential for implementing a Road Diet on Lomas Boulevard between Girard Boulevard and San Pedro Drive in Albuquerque, New Mexico. The study assesses the impacts of converting the existing roadway configuration to a more business and community friendly configuration by reducing the number of travel lanes and reallocating space for Business Access and Transit (BAT) lanes.

A Business Access and Transit (BAT) lane is a lane reserved primarily for transit vehicles but that also permits right-turn movements into and out of adjacent driveways and side streets, allowing continued access to local businesses while maintaining priority for buses.

The primary goals of a Road Diet implementation are to:

- Improve safety for all roadway users, including motorists, pedestrians, cyclists, and transit riders.
- Prioritize transit and pedestrian multimodality along the corridor.
- Assess potential operational impacts on traffic flow and intersection performance.
- Support the City of Albuquerque's Complete Streets policy and Vision Zero efforts.

STUDY OVERVIEW

Lomas Boulevard is a principal east-west arterial in Albuquerque, serving a mix of residential, commercial, and institutional land uses. The segment between Girard Boulevard and San Pedro Drive is characterized by:

- **Four to six travel lanes** with a center two-way left-turn lane (TWLTL) in some sections and a raised median in others.

- **High traffic volumes**, with Annual Average Daily Traffic (AADT) exceeding 20,000 vehicles per day in some locations.
- **Significant pedestrian and transit activity**, including multiple bus stops along the corridor.
- **History of high crash rates**, particularly involving left-turn conflicts, pedestrian crossings, and speeding concerns.

The study corridor and study intersections can be seen in Figure 1.



Figure 1: Study Corridor and Intersections

Study Approach & Methodology Summary

This study follows the Federal Highway Administration (FHWA) Road Diet Informational Guide (2014) framework, along with guidance from the Highway Safety Manual (HSM) and AASHTO's Green Book. The evaluation process includes:

1. **Crash and Safety Review** – A detailed review of five years of crashes occurring on the study corridor between 2019 and 2023. This crash dataset contains 662 crashes.
2. **Traffic Operational Analysis** – An evaluation of operational parameters and impacts such as AADT, level of service (LOS), and queue lengths using Synchro 12 traffic analysis software. This evaluation includes four study scenarios:
 - I. **Existing** – conditions based on current TMC data and roadway lane configuration.
 - II. **Existing Diverted** – conditions based on TMC data with the addition of Lead and Coal diverted traffic volumes onto the current roadway lane configuration.
 - III. **Road Diet** – conditions based on current TMC data and proposed Road Diet lane configuration.
 - IV. **Road Diet Diverted** – conditions based on TMC data with the addition of Lead and Coal diverted traffic volumes onto the proposed Road Diet lane configuration.
3. **Multimodal Assessment** – Examining pedestrian, bicycle, and transit facilities along the corridor.
4. **Road Diet Design Concept** – A narrative description and graphic representation of the potential lane striping modifications and intersection treatments to be implemented with a Road Diet.

The results of this study will help inform whether a road diet is a viable solution for improving safety, mobility, and livability along Lomas Blvd while maintaining reasonable traffic operations.

STUDY CORRIDOR EXISTING CONDITIONS SUMMARY

Lomas Blvd Study Corridor Description

Lomas Blvd between Girard Blvd and San Pedro Dr is a principal urban arterial running east and west in the northeast quadrant of Albuquerque. The roadway has a posted speed limit of 35 MPH from Girard Blvd east to San Mateo Blvd. East of San Mateo Blvd the posted speed limit increases to 40 MPH.

Within the study segment of Lomas Blvd, the typical cross-section of the road is variable. Moving east to west, between San Pedro Dr and San Mateo Blvd, Lomas Blvd is a six-lane median-divided roadway. At San Mateo Blvd, the westbound approach has an outside lane that terminates as a right-turn-only lane. Between San Mateo Blvd and Washington St the roadway consists of three lanes eastbound and two lanes westbound divided by a TWLTL. From Washington St to Girard Blvd, the road returns to six lanes divided by a raised median.

Study Intersection Descriptions

Lomas Blvd & Girard Blvd is a four-legged signalized intersection with Girard Blvd, which runs north-south. Girard has a posted speed limit of 30 MPH. The north and south legs comprise a left-turn lane, a shared through/right-turn lane, and a bike lane. The east and west legs comprise a left-turn lane, two through lanes, and a shared through/right-turn lane. All lanes on the east and west legs are 10 to 11 feet wide. Driving lanes on the north and south legs are 11 to 12 feet wide. Bike lanes are four to five feet wide. Sidewalks are present at all approaches and vary from four to six feet in width. All approaches have crosswalks and stop bars.

Lomas Blvd & Carlisle Blvd is a five-legged signalized intersection with two minor arterials. Carlisle Blvd runs north-south and has a posted speed limit of 30 MPH north of the intersection and 25 MPH south of the intersection. Monte Vista Blvd runs northeast-southwest and has a posted speed limit of 35 MPH. The north leg comprises a left-turn lane, a through lane, a bear-right lane, and a right-turn lane. The east and west legs comprise a left-turn lane, two through lanes, and a shared through/right-turn lane. The south leg comprises a left-turn lane and a shared through/right-turn lane. The southwest leg comprises a bear-left lane, and two bear-right lanes. All driving lanes are approximately 11 feet in width except on the north leg, where lanes are 10 feet in width. Sidewalks are present at all approaches and vary from four to six feet in width. Crosswalks are present on all legs except the west leg. All approaches have stop bars. Bike lanes are present at the north and southwest legs, but merge with driving lanes as they approach the intersection. A bike lane is present in the northbound direction on the north leg.

Lomas Blvd & Morningside Dr is a three-legged signalized intersection with Morningside Dr, which is a local street running north-south that has a speed limit of 25 MPH. The east leg comprises three through lanes and a left-turn lane. The south leg comprises a left-turn lane and a right-turn lane. The west leg comprises two through lanes and a shared through/right-turn lane. All lanes are approximately 10 feet wide except the left-turn lane on the east leg, which is

12 feet wide. Sidewalks are present at all approaches and vary from three to six feet in width. Crosswalks are present on the east and south legs. All approaches have stop bars.

Lomas Blvd & Washington St is a four-legged signalized intersection with Washington St, which runs north-south and has a posted speed limit of 30 MPH. The north and south legs comprise a left-turn lane and a shared through/right-turn lane. The north and south legs also have bike lanes that merge with the driving lanes as they approach the intersection. The east leg comprises a left-turn lane, a through lane, and a shared through/right-turn lane. The west leg comprises a left-turn lane, two through lanes, and a shared through/right-turn lane. All lanes on the east and west legs are 10 to 11 feet wide. Lanes on the north and south legs vary from 9 to 13 feet wide. Sidewalks are present at all approaches and vary from four to six feet in width. Crosswalks with stop bars are present at all legs.

Lomas Blvd & Monroe St is a four-legged signalized intersection with Monroe Blvd that runs north-south and has a posted speed limit of 25 MPH. The north leg comprises a single shared lane for all turning and through movements. The east leg comprises a left-turn lane, a through lane, and a shared through/right-turn lane. The south leg comprises a shared left-turn/through lane and a right-turn only lane. The west leg comprises a left-turn lane, two through lanes, and a shared through/right-turn lane. All lanes are approximately 10 feet wide except the north leg, which has a single 13-foot-wide lane. Six-foot-wide sidewalks are present at all approaches except the north leg on the northbound side of the road. Crosswalks with stop bars are present on all legs.

Lomas Blvd & San Mateo Blvd is a four-legged signalized intersection of two principal arterials. Lomas Blvd runs east-west and has a posted speed limit of 35 MPH. San Mateo Blvd runs north-south and has a posted speed limit of 40 MPH. The north, south, and west legs comprise a left-turn lane, two through lanes, and a shared through/right-turn lane. The east leg comprises a left-turn lane, two through lanes, and a right-turn lane. Lanes on the north and south legs are approximately 12 feet wide, while the east and west legs have 11.5-foot lanes. Sidewalks at all approaches are 5.5 feet wide. Crosswalks and stop-bars are present at each leg.

Lomas Blvd & San Pedro Dr is a four-legged intersection of a principal arterial and a minor arterial. Lomas Blvd runs east-west and has a posted speed limit of 35 MPH. San Pedro Dr runs north-south and has a posted speed limit of 35 MPH. The north leg comprises a left-turn lane, a through lane, and a shared through/right-turn lane. The east and west legs comprise a left-turn lane, two through lanes, and a shared through/right-turn lane. The south leg comprises a left-turn lane, two through lanes, and a right-turn lane. Five to seven-foot-wide sidewalks are present at all approaches. Crosswalks and stop bars are present at all approaches.

The existing intersection lane configuration is shown in Figure 2 below

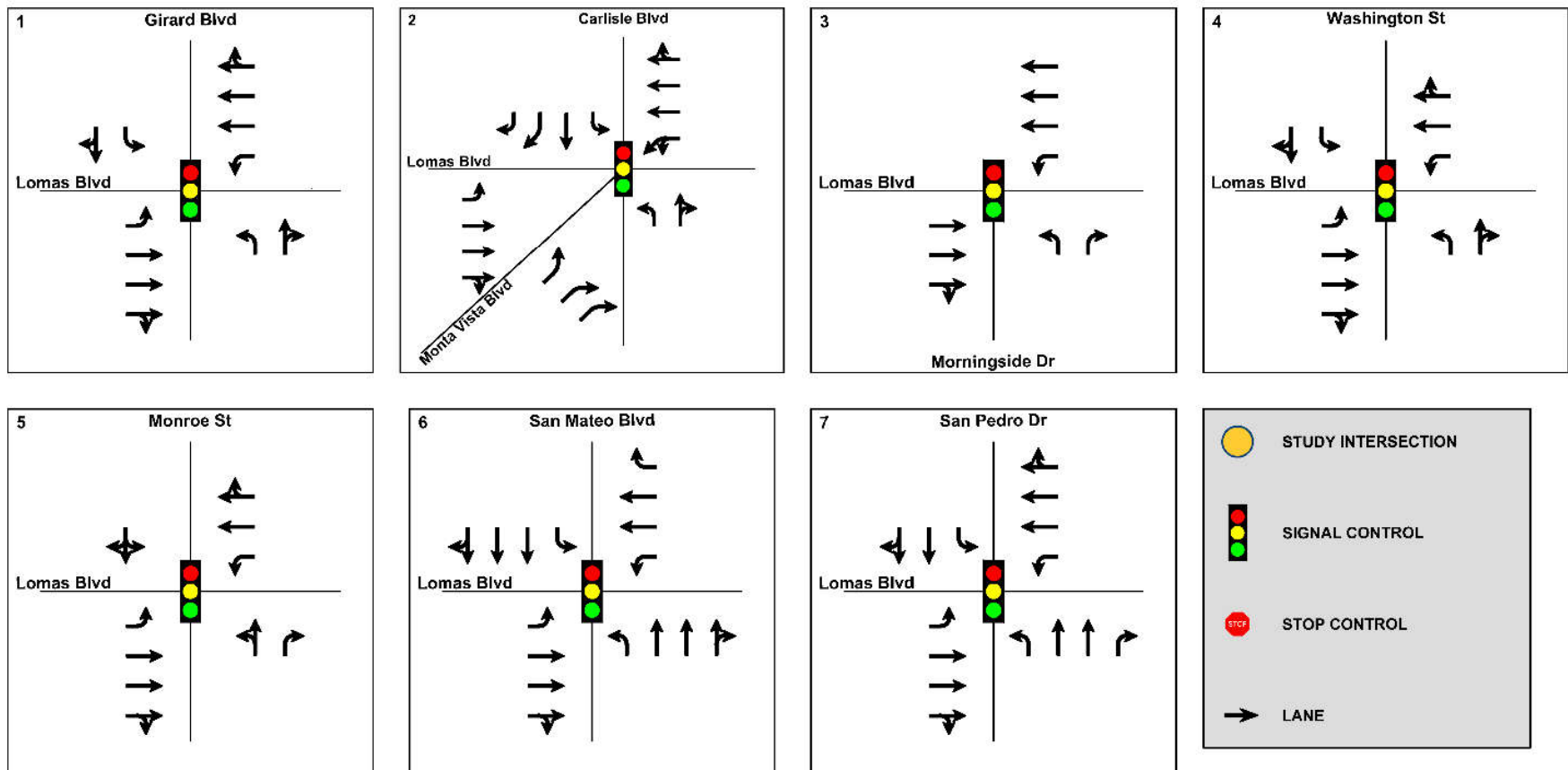


Figure 2: Existing Intersection Lane Configuration

CRASH AND SAFETY REVIEW

CRASH DATA LIMITATIONS

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

CRASH ANALYSIS

This study analyzed five years of crashes occurring on Lomas from Girard Boulevard to San Pedro Drive between 2019 and 2023. This crash dataset contains 662 crashes and is the most recent available. The intersection of San Mateo Boulevard saw the most crashes, followed by the intersections of San Pedro Drive and Carlisle/Monte Vista Boulevards. These hot spots likely correspond to the traffic volumes at these intersections. Figure 3 shows a heat map of the reported crashes in the study corridor.

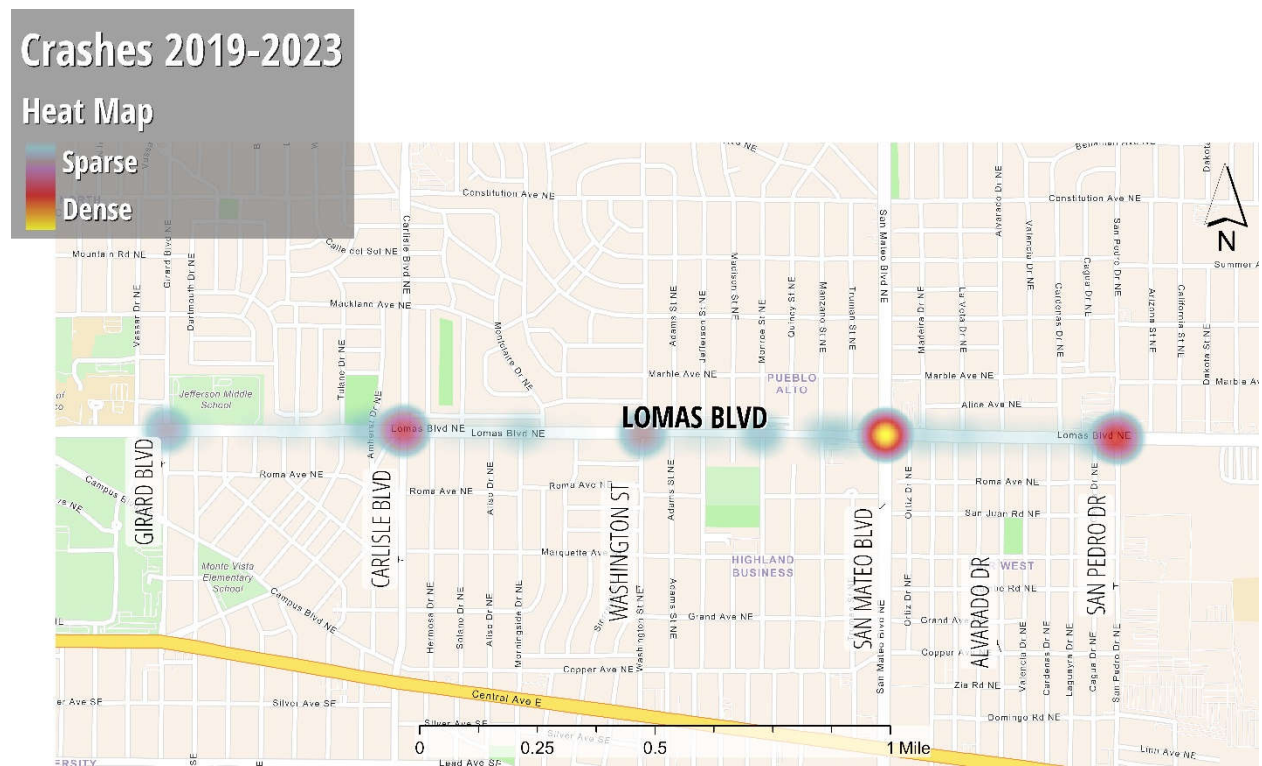


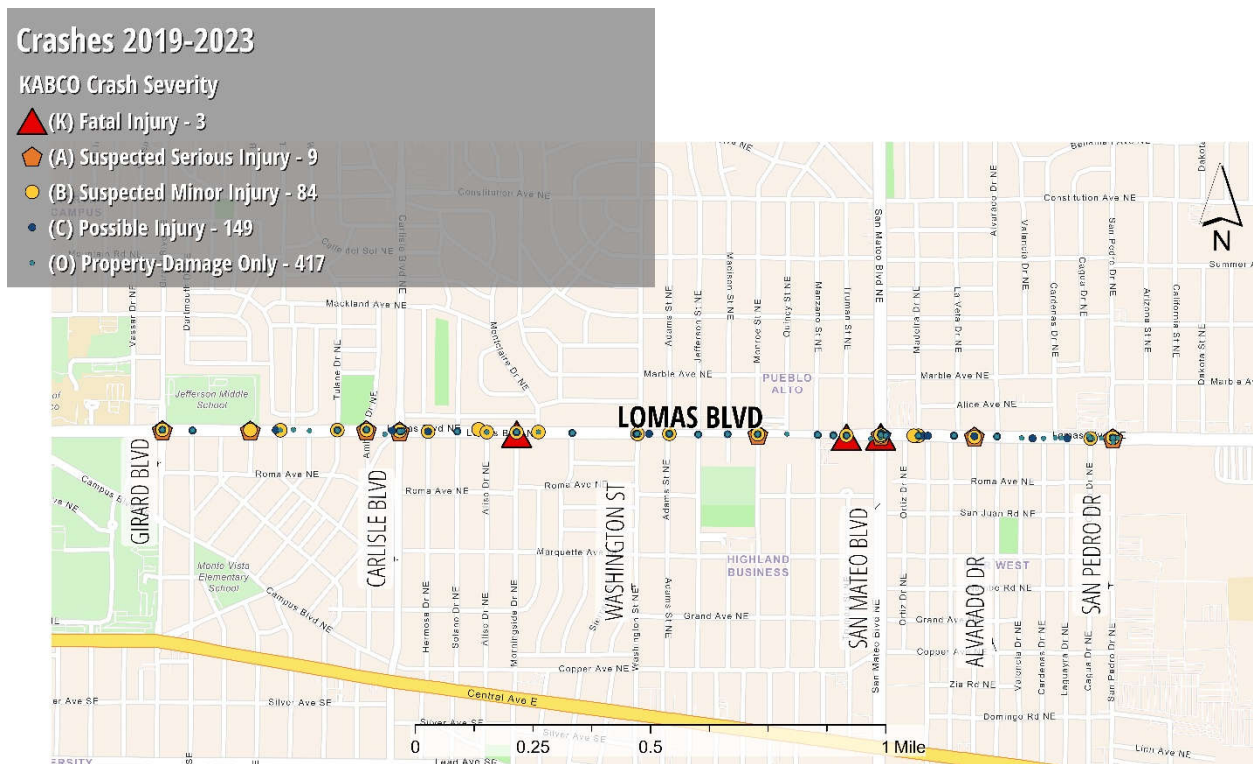
Figure 3: Lomas Crash Heat Map (N=662), 2019-2023

SEVERITY

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

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

This study reviewed five years of crash data. During that time, there were 662 crashes; three were Fatal (K), nine resulted in Serious Injuries (A), and 650 crashes resulted in Minor Injuries (B), Suspected Injuries (C), or Property Damage Only (O). The three Fatal crashes involved vulnerable road users: a pedestrian, a bicyclist, and a motorcyclist. Additionally, one pedestrian, one bicyclist, and two motorcyclist crashes resulted in Serious Injuries. Figure 4 illustrates the crashes in the study area by location and severity.



YEAR

Crashes were at their highest in 2019 and significantly dipped in 2020, likely resulting from the impacts of travel and driver behavior caused by COVID-19. Crashes began to increase again in 2021 but fell in 2022 and 2023. Figure 5 shows crashes per year within the study corridors between 2019 and 2023.

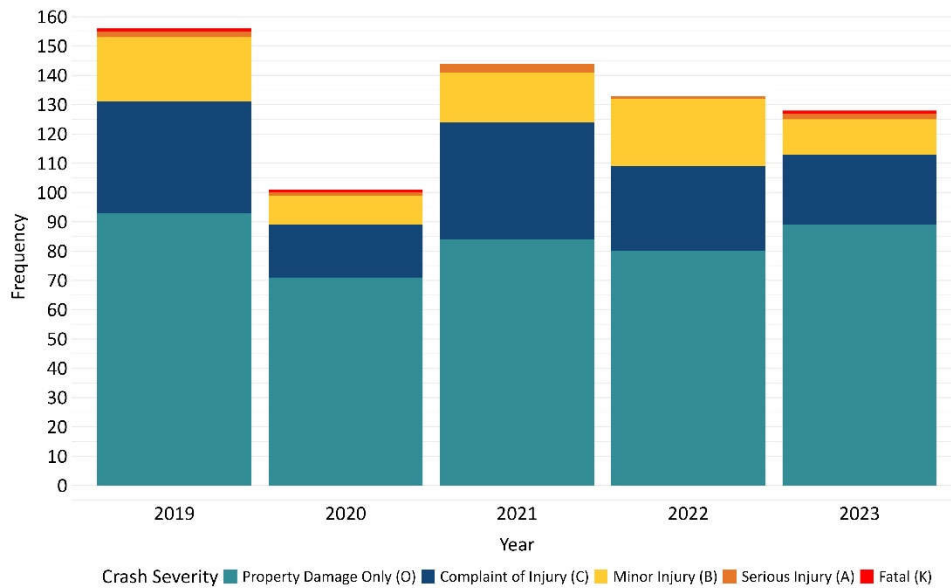


Figure 5: Crashes per Year, 2019-2023

MONTH

Crash frequency is highest in August but gradually declines through December. January through July experiences fluctuation in crashes with peaks in March and June. Fatal crashes occurred in February, March, and April. Figure 6 shows crashes and severity by month.

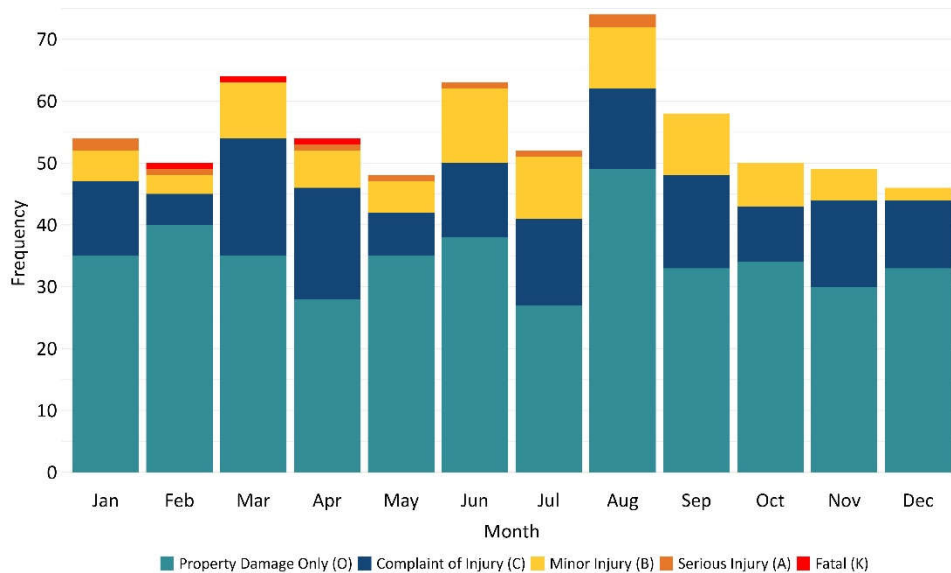


Figure 6: Crash Severity by Month

DAY OF WEEK

Crash frequency is highest on weekdays, with peaks on Wednesdays and Fridays. Fewer crashes on the weekend suggest less traffic. Figure 7 shows crashes and severity by day of the week.

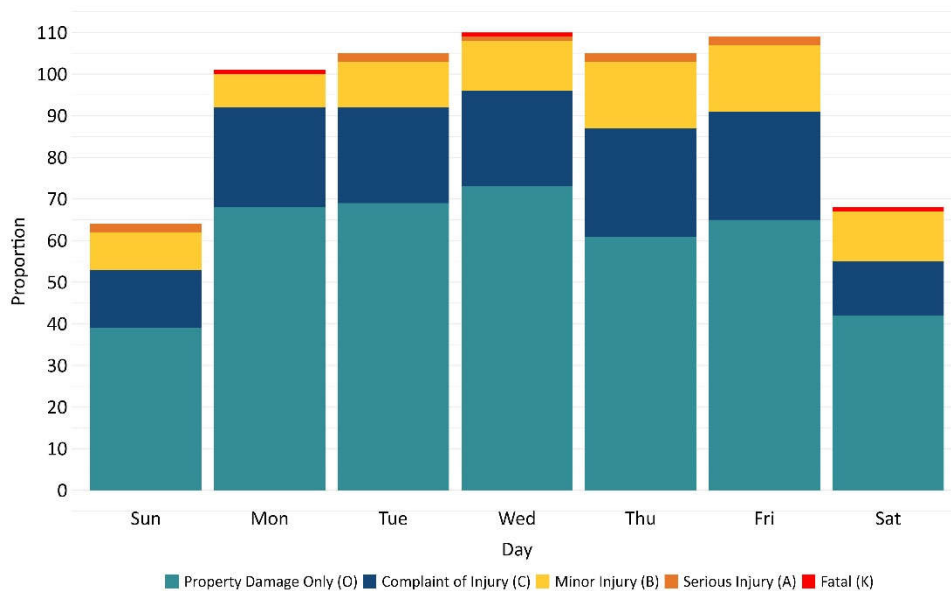


Figure 7: Crash Severity by Day of the Week

TIME OF DAY

The crash frequency per hour echoes typical daily traffic trends; crashes increase with traffic volume. Crashes are lowest between 12:00 AM and 5:00 AM. Crashes gradually increase after 6:00 AM, peaking between noon and 1:00 PM. The AM peak is between 10:00 AM and 11:00 AM, the midday peak is during the noon hour, and the afternoon peak spans between 4:00 PM

and 6:00 PM. Figure 8 highlights how crash frequency tends to increase during peak traffic hours.

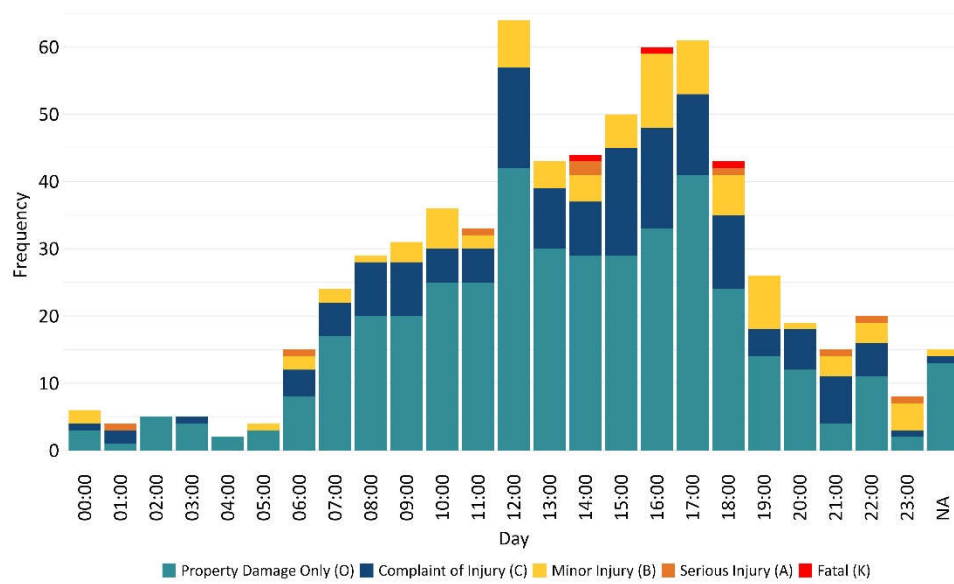


Figure 8: Crash Severity by the Time of Day

LIGHTING CONDITION

Most crashes (~86%), occur under Daylight or Dark-Lighted conditions. These trends suggest that inadequate lighting is not a significant contributor to crashes in the study corridor. Figure 9 is a proportional bar chart summarizing crashes by lighting condition.

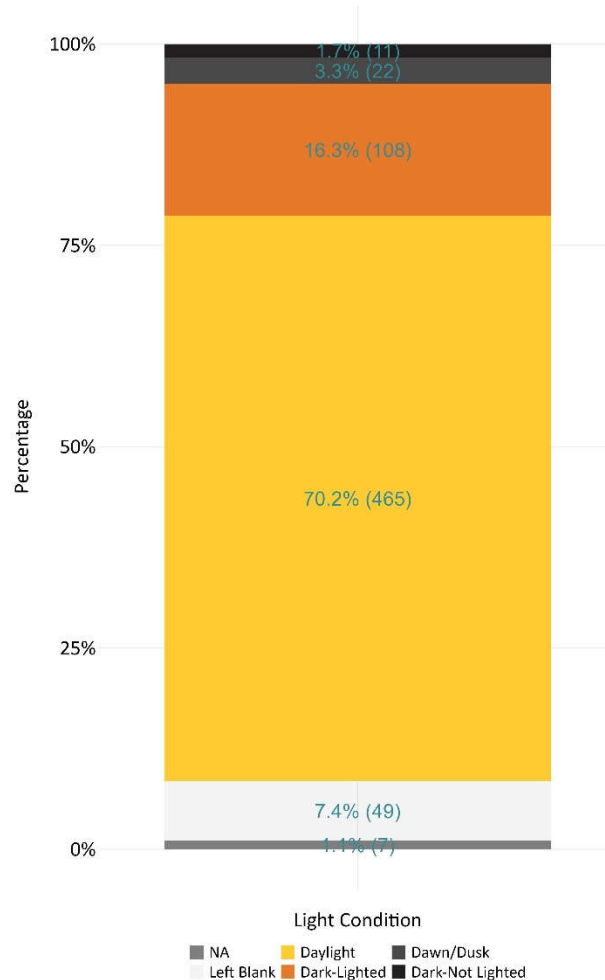


Figure 9: Crash Proportions by Lighting Condition

SPEED-INVOLVED CRASHES

Speed is a factor in crashes that directly affects crash severity. When considering the kinetic energy involved in a crash, speed increases the kinetic energy exponentially. The kinetic energy of a vehicle of mass (m) traveling at a speed (v) is $1/2mv^2$. Managing speed is critical to eliminating fatal and serious injury crashes. Speed-related crashes are interpreted as crashes in which the contributing factor is reported as "Excessive Speed," "High-Speed Pursuit," or "Speed Too Fast for Conditions." However, speed may not be attributed to every crash where it was a contributing factor. Speed contributes to nearly eight percent of crashes in the study corridor. This dataset indicates that speed contributed to one fatal and two serious injury crashes. Figure 10 shows the locations of speed-involved crashes in the study corridor.

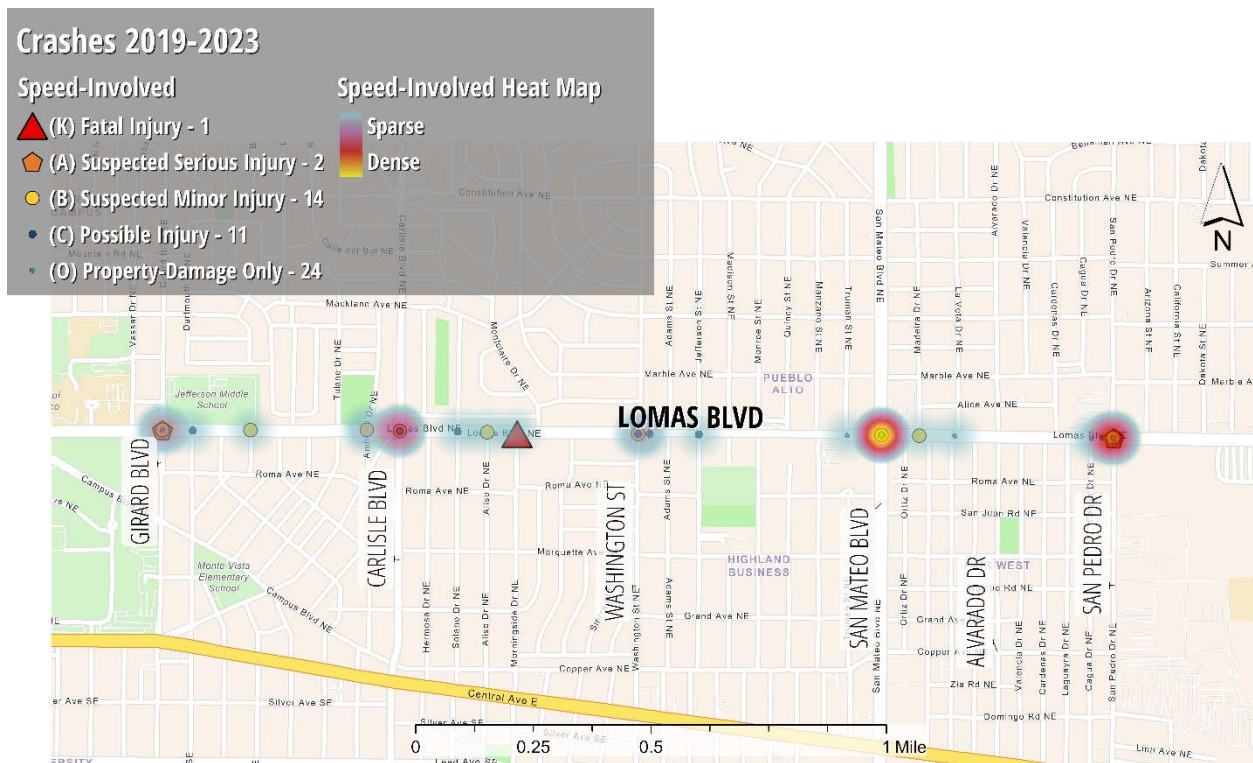


Figure 10: Speed-involved Crashes Heat Map, 2019-2023

MULTIMODAL CRASHES

Pedestrians, bicyclists, and other vulnerable road users are subject to more significant consequences when involved in a motor vehicle crash. Vulnerable road users are disproportionately represented in the most severe crashes in this corridor. Figure 11 is a proportional bar chart showing the proportion of transportation mode involvement by crash severity.

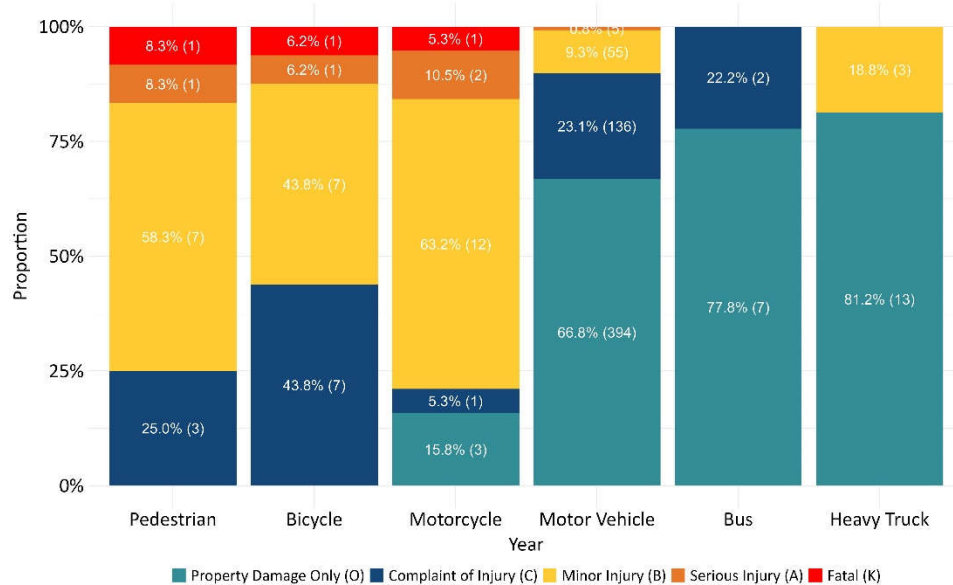


Figure 11: Proportion of Crash Severity by Mode of Transportation, 2019-2023

CRASH ANALYSIS

A crash's Crash Analysis describes how the manner of the crash. Crash Analysis data was available for 265 of the crashes in this dataset. Of the crashes with this data, *Other Vehicle – From Opposite Direction* are the most common. *Other Vehicle – From Same Direction/Rear End Collision* is the next most common, followed by *Other Vehicle – One Left Turn/Entering at Angle* and *Other Vehicle – Both Going Straight/Entering at Angle*. These crash types suggest that the most common collision types are head-on, angle or t-bone, sideswipe, and rear-end crashes. Figure 12 shows crash frequency by crash analysis and severity.

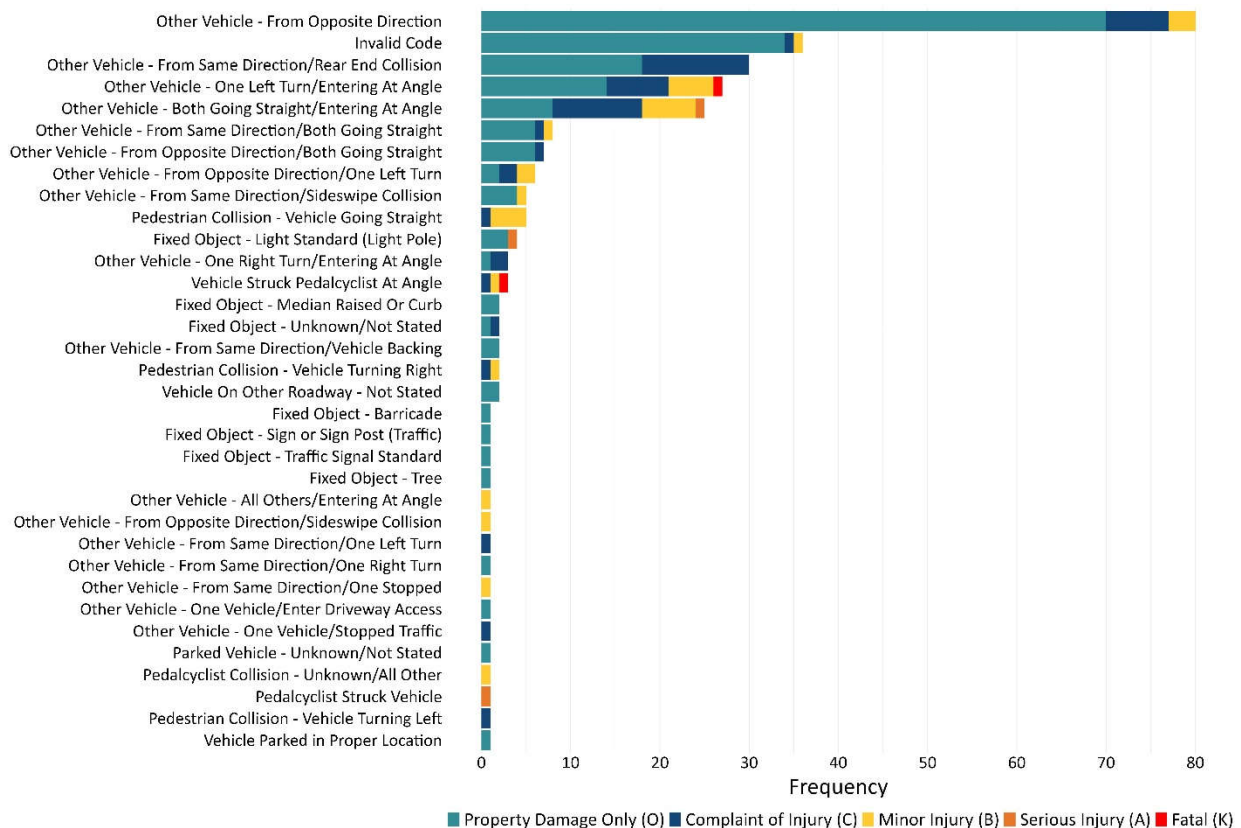


Figure 12: Crash Severity by Crash Analysis, 2019-2023

SLIDING WINDOW SAFETY ANALYSIS

A Sliding Window Analysis helps identify high-risk locations on a road from the crash data. This approach systematically assesses roadway segments and prioritizes safety improvements. A sliding window of 0.1 miles is used to incrementally evaluate the study corridor and intersecting road segments using the most recent three years (2021-2023) of crash data. The analysis uses the crash data to determine an equivalent property damage only (ePDO) score. The ePDO method from the Highway Safety Manual assigns weights crashes by their severity of fatal, injury, and property damage-only crashes to develop a score that considers the frequency and severity of crashes. These scores can be used to identify high-crash locations and rank and prioritize areas for safety improvements. Most segments along Lomas Boulevard indicate an ePDO score of less than 25, except for the segment that intersects with San Mateo Boulevard, which is slightly elevated with a score of 31. Correspondingly, the location with the highest ePDO score is north of the intersection of San Mateo and Lomas Boulevard, as indicated by the red segment on San Mateo Boulevard extending north of Lomas Boulevard. Other locations with higher ePDO scores are near the intersections of Lomas Boulevard with San Pedro Drive, Carlisle/Monte Vista Boulevards, Washington Street, and Girard Boulevard. The ePDO scores are shown below in Figure 13



Figure 13: Equivalent Property Damage Only Score Map

POTENTIAL SAFETY COUNTERMEASURES

Reflective Backplates, Adjust Yellow Change Intervals, Retime Signals

The signalized intersections in this corridor comprise Girard Boulevard, Carlisle/Monte Vista Boulevards, Morningside Drive, Washington Street, Monroe Street, San Mateo Boulevard, and San Pedro Drive. Several low-cost countermeasures may improve safety at these intersections. One is to enhance the traffic signal heads by adding retroreflective borders to the backplates. Signal heads with reflective backplates increase visibility during daylight and dark conditions and may reduce crashes by up to 15%¹. Another method to enhance is to adjust the Yellow Change Intervals and signal timing for current traffic conditions. Appropriately timed yellow change intervals may reduce intersection crashes by up to 14% and red light running by up to 50%².

Red Extension

Red Extension (also known as Red Clearance Extension or All-Red Extension) is a traffic signal safety feature designed to prevent right-angle (T-bone) collisions by detecting late or unexpected entries into the intersection after the onset of red. The system uses vehicle detection to identify vehicles that are likely to run the red light or that have entered the intersection during the clearance interval. When such a vehicle is detected, the signal controller automatically extends the opposing red interval, delaying the release of conflicting movements until the red light-running vehicle has cleared the intersection.

Red Extension can reduce severe right-angle crashes caused by red-light running. By dynamically extending the red phase, it compensates for driver misjudgment, slippery pavement conditions, or unexpected deceleration during the yellow indication. This proactive approach enhances intersection safety without significantly affecting efficiency, particularly at high-speed approaches or locations with a history of red-light violations. The installation of a Dynamic Red Extension system can reduce the type of accident caused by red light runners by up to 32% according to the FHWA's Crash Modification Factor Clearinghouse.

Rest-In-Red

The Rest-in-Red (RiR) operation is a traffic signal management strategy designed to optimize intersection responsiveness and enhance safety. The basic RiR method ensures that signals return to red in all directions when no vehicles are detected, allowing immediate service for approaching vehicles. The Enhanced RiR operation incorporates advanced traffic and speed detection on major streets, enabling speed-compliant vehicles to receive green signals upon approach from an advanced distance away. At the same time, non-compliant drivers must approach the stop bar in order to be served by the signal. This encourages adherence to speed limits without penalizing compliant drivers. Enhanced RiR has been implemented at eight

¹ Sayed, T., Leur, P., and Pump, J., "Safety Impact of Increased Traffic Signal Backboards Conspicuity."

² NCHRP Report 731: Guidelines for Timing Yellow and All-Red Intervals at Signalized Intersections.

intersections along Lead and Coal Avenues and is also in operation at the Lomas Blvd and Morningside Dr intersection.

Results from speed data comparisons before (2021) and after (2023) Lead and Coal corridor implementation show significant improvements. Speed reductions were recorded at six out of eight monitored locations, with reductions of ~10 mph at two locations and ~5 mph at three. These changes resulted in safer and more consistent driving behavior, with reduced variability, a key indicator of improved roadway safety. These findings suggest that Enhanced Rest-in-Red is a cost-effective traffic signal safety improvement with clear safety benefits.

Leading Pedestrian Intervals and Turning Lane Pedestrian Indicators

Furthermore, Leading Pedestrian Intervals and Turning Lane Pedestrian Indicators may improve safety outcomes at intersections with higher motor vehicle and pedestrian volumes, such as Girard Boulevard, Carlisle/Monte Vista Boulevards, Washington Street, San Mateo Boulevard, and San Pedro Drive. It should be noted that these countermeasures have an associated cost that could run as high as \$100,000 per intersection due to the equipment upgrades that would be required to implement them.

An LPI allows pedestrians to enter the crosswalk 3 to 7 seconds before the traffic signal turns green for vehicles. Doing so enhances pedestrian visibility, increases the likelihood of motorists yielding to pedestrians, and minimizes pedestrian and vehicle conflicts. Additionally, LPIs increase safety for pedestrians who walk at a slower pace. LPIs can provide a 13% reduction in pedestrian-vehicle crashes³. The current controllers and cabinets present at the intersections in the study area do not support LPI's, these would need to be upgraded, costing up to \$100,000 per intersection.

When implementing LPIs, upgrading the pedestrian call buttons to Accessible Pedestrian Signals (APS) is required with LPI to ensure that visually impaired individuals can cross streets safely. LPIs allow pedestrians to start crossing earlier, visually impaired pedestrians need to know when the pedestrian interval begins. APS provide auditory or tactile cues to alert visually impaired pedestrians when it's safe to start crossing since they cannot rely on the *Walk* signal. Additionally, LPIs work with ASC/3 or Cobalt controllers and TS2 signal cabinets. Implementing LPI at an intersection with protected/permissive left-turn phasing may be challenging and require signal phasing modifications. If pedestrian volumes, signal technology, or left-turn phasing are obstacles to LPI implementation, Turn Lane Pedestrian Indicators (TLPI) may enhance pedestrian safety at signalized intersections. TLPI activated LED-illuminated R10-15 signs, as shown in Figure 14 when pedestrians press the pedestrian call button to enhance driver awareness where left-turning drivers are focused on vehicular traffic and overlooking pedestrians in crosswalks.

³ Goughnour, E., D. Carter, C. Lyon, B. Persaud, B. Lan, P. Chun, I. Hamilton, and K. Signor. "Safety Evaluation of Protected Left-Turn Phasing and Leading Pedestrian Intervals on Pedestrian Safety."



Figure 14: LED-Illuminated R10-15 Sign

Flashing Yellow Arrows

Flashing Yellow Arrow (FYA) may reduce left-turn crashes at signalized intersections and enhance pedestrian safety. FYA provides flexibility for Pedestrian-Protected Signal Phasing and time-of-day Protected-only phasing at intersections that operate Protected/Permissive Left-Turn phasing. The four intersections with Lomas Blvd where FYA implementation could be beneficial for the east and westbound through are Girard Blvd, Carlisle Blvd, San Mateo Blvd, and San Pedro Dr. The traffic controllers at these intersections can support FYA operations. Additionally, all the approaches proposed to receive FYA improvements have existing median-mounted signal poles.

R10-15 Signs

Adding R10-15 *Turning Vehicles Yield To Pedestrians* Signs to all Monroe Street and Lomas Boulevard approaches may improve pedestrian safety at this intersection. These signs act as a visual cue to encourage motorists to look for pedestrians before completing their turn.

Intersection Lane Extension Markings

Pavement Markings communicate information about the road to motorists to ensure safe and efficient operation. A recommended countermeasure is to apply retroreflective pavement markings that clarify travel paths through the intersection of Carlisle/Monte Vista and Lomas Boulevards. This recommendation comprises dotted right-turn lane line extensions on the northeast bound approach of Monte Vista Boulevard and the southbound approach of Carlisle Boulevard.

Uncontrolled Pedestrian/School Crossing Visibility Enhancements

Three uncontrolled pedestrian/school crossings may improve pedestrian safety with additional visibility enhancements. Pedestrians using the marked crossing west of Wellesley Drive and Lomas Boulevard may benefit from advanced yield markings and complementary R1-5 *Yield Here to Pedestrians* signs, a Rectangular Rapid Flashing Beacon (RRFB) assembly, and

illumination placed in between approaching traffic and the crossing to not silhouette pedestrians using the crossing during darker hours. Advanced yield markings and signs are an FHWA-proven safety countermeasure and may reduce pedestrian crashes by up to 25%⁴. Crossing illumination is also an FHWA-proven safety countermeasure and may reduce pedestrian crashes by up to 42%⁵. These same treatments and a pedestrian refuge island can improve safety at the uncontrolled, marked crossing on the east approach at Jefferson Street and Lomas Boulevard.

SUMMARY OF SAFETY COUNTERMEASURES

This section lists the recommended safety countermeasures by their locations:

Corridor Wide

- Adjust Yellow Change Intervals and Retime Signals
- At signalized intersections, the implementation of Red Extension and Rest-In-Red operations at appropriate locations, as determined by the engineering judgement of City Engineers.

Girard Boulevard

- FYA
- LPI
- Reflective Backplates

Uncontrolled Pedestrian/School Crossing West of Wellesley Drive

- Advanced Yield Markings
- Illumination
- R1-5 signs
- RRFB

Carlisle/Monte Vista Boulevards

- FYA
- Lane Extension Markings
- LPI
- Reflective Backplates

Morningside Drive

- Reflective Backplates
- TLPI

Washington Street

- FYA
- LPI

⁴ Zeeger et al., "Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments"

⁵ Elvik, R. and Vaa, T., "Handbook of Road Safety Measures"

- Reflective Backplates

Uncontrolled Pedestrian/School Crossing on the East Approach of Lomas at Jefferson Street

- Advanced Yield Markings
- Illumination
- R1-5 signs
- RRFB

Monroe Street

- R10-15 Signs
- Reflective Backplates

San Mateo Boulevard

- FYA or Left on Arrow Only (Determined Based on Sight Distance Measurement)
- LPI
- Reflective Backplates

San Pedro Drive

- FYA
- LPI
- Reflective Backplates

In addition to the safety countermeasures recommended above, Lomas Blvd may benefit from a road diet implementation. The proposed road diet concept is presented in the following section.

ROAD DIET DESIGN CONCEPT

The Road Diet concept along the Lomas Blvd corridor between Girard Blvd and San Pedro primarily aims to slow automobile traffic to safer speeds for drivers, pedestrians, and bicyclists. It is also intended to improve the comfort and usability of the roadway for non-motorist users. To accomplish this, the design concept starts by removing the outermost driving lane and replacing it with a BAT lane where possible.

The following series of figures show iconographic typical roadway sections at each of the signalized intersections and for the roadway segments in between. All of the cross-section figures show Lomas Blvd from an eastward-facing perspective and are intended to be conceptual rather than prescriptive in nature.

The first cross-section, Figure 15 shows the Lomas Blvd and Girard Blvd intersection.

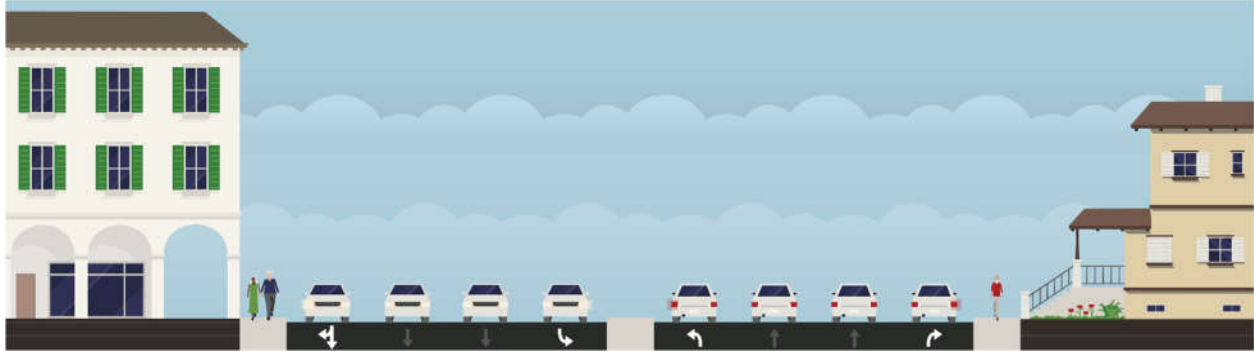


Figure 15: Lomas Blvd at Girard Blvd

This intersection starts the Road Diet concept from the west to the east. West of Girard Blvd, Lomas will continue to be three lanes in each direction. Thus, the westbound roadway would widen from two lanes to three on the approach to Girard Blvd, ending the proposed BAT lane at this intersection, allowing through/right operation for passenger vehicles departing westbound.

On the eastbound approach, the outermost through/right lane would be converted into a terminating right-turn-only lane. On the east side of the intersection, a BAT lane would be introduced into the space formerly occupied by the outside through lane. This BAT lane is shown in the next figure of the cross-section between Girard Blvd and Tulane Dr.

The roadway segment between Girard Blvd and Tulane Dr would consist of two through lanes and a BAT lane in each direction. BAT lanes and roadway striping would be used to narrow the through lanes, helping to calm traffic speeds. The roadway cross-section of this segment of Lomas Blvd is shown in Figure 16.

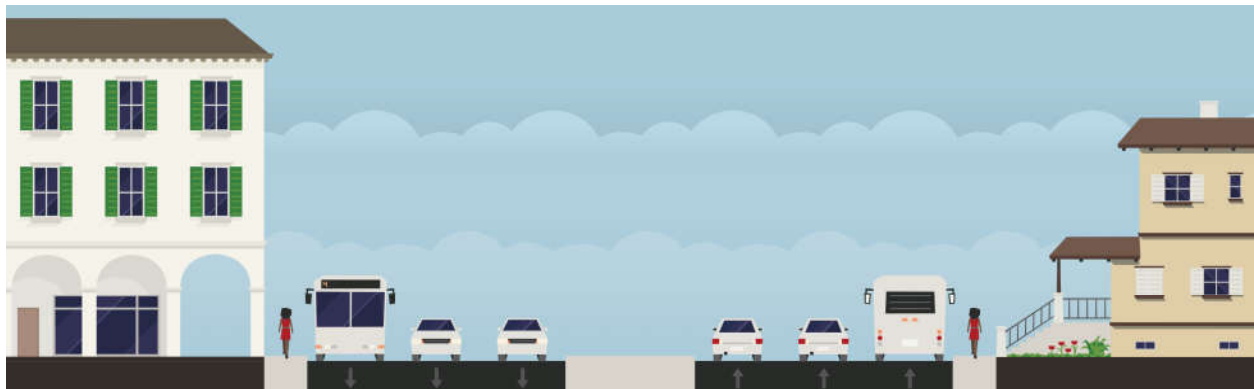


Figure 16: Lomas Blvd Between Girard Blvd and Amherst Dr

As the Road Diet continues east, the next signalized intersection is Lomas Blvd and Carlisle Blvd. Due to the traffic volumes in conjunction with the fact that this intersection has five approaches, the complete removal of the outside eastbound and westbound lanes resulted in delay and queue lengths that would not be acceptable. Therefore, the BAT lane would temporarily end between Tulane Dr and Solano Dr through the intersection. At the Lomas Blvd

intersection with Carlisle Blvd and Monte Vista Blvd, the roadway cross-section of Lomas Blvd from the east-facing perspective is shown in Figure 17.



Figure 17: Lomas Blvd at Carlisle Blvd/Monte Vista Blvd

As mentioned, the six-lane cross-section above would stretch from Tulane Dr to Solano Dr. From Solano Dr east to Morningside Dr, the road diet concept would implement four normal travel lanes, with BAT lanes east and west. The roadway cross-section would continue as shown in Figure 18.

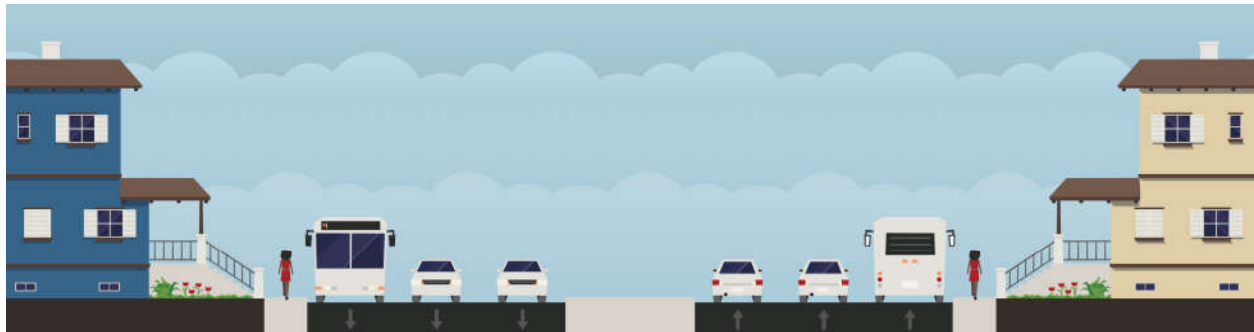


Figure 18: Lomas Blvd Between Solano Dr and Morningside Dr

At the three-leg intersection of Lomas Blvd with Morningside Dr, the cross-section is shown in Figure 19. At the Morningside Dr intersection with Lomas Blvd, the Road Diet concept continues with two through lanes, a dedicated westbound left turn, and an eastbound BAT lane permitting passenger vehicles a right-turn-only turn movement. BAT lanes would continue along both sides of the roadway.

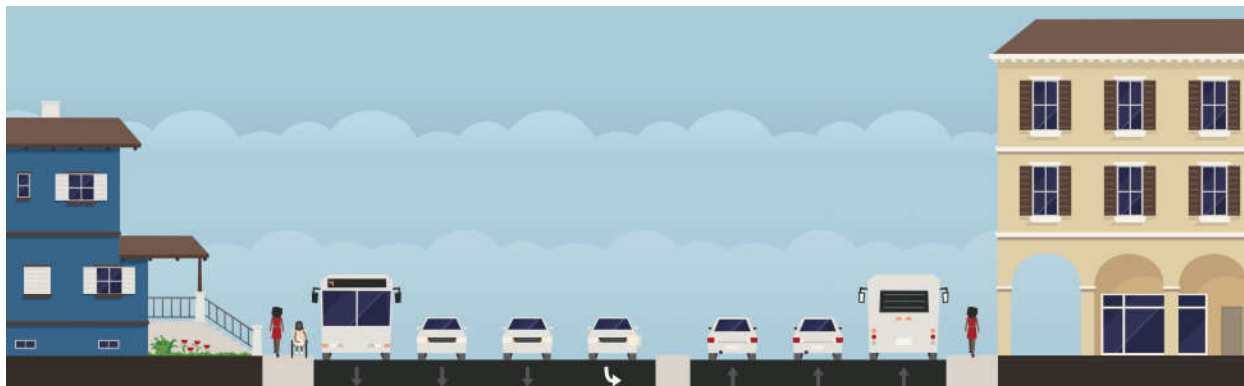


Figure 19: Lomas Blvd at Morningside Dr

The cross-section of Lomas Blvd between Morningside Dr and Washington St is shown in Figure 20.



Figure 20: Lomas Blvd Between Morningside Dr and Washington St

The cross-section between Morningside Dr and Washington St would be identical to the roadway segment between Solano Dr and Morningside Dr as a four-lane median divided roadway with BAT lanes on both sides of the roadway. Figure 21 shows the proposed cross-section of Lomas Blvd with Washington St. These treatments would continue the eastbound BAT lane through the Lomas Blvd and Washington St intersection.



Figure 21: Lomas Blvd at Washington St

The roadway segment of Lomas Blvd between Washington St and San Mateo Blvd is currently a five-lane roadway with three lanes for eastbound traffic and two in the westbound direction, divided by a Two-Way-Left-Turn-Lane (TWLTL). The roadway width of this segment is subsequently narrower than that of the other segments considered. As such, a westbound BAT

lane must be forgone within this segment. The portion of this segment between Washington St and Monroe St is shown in Figure 22 with an eastbound BAT lane.

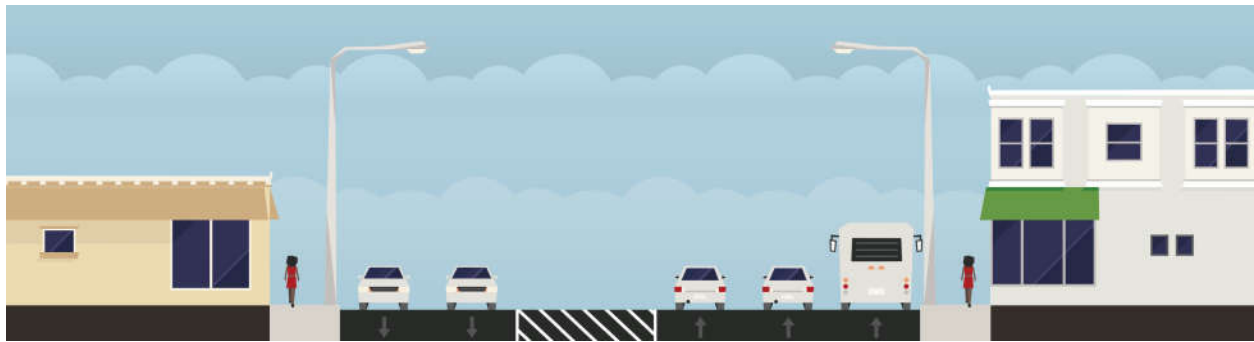


Figure 22: Lomas Blvd Between Washington St and Monroe St

The wide centerline shown in white in Figure 22 would remain a 10-foot wide yellow striped TWLTL.

The next intersection is Lomas Blvd at Monroe St, which is presented in Figure 23. These treatments would continue the eastbound BAT lane through the Lomas Blvd and Monroe St intersection.

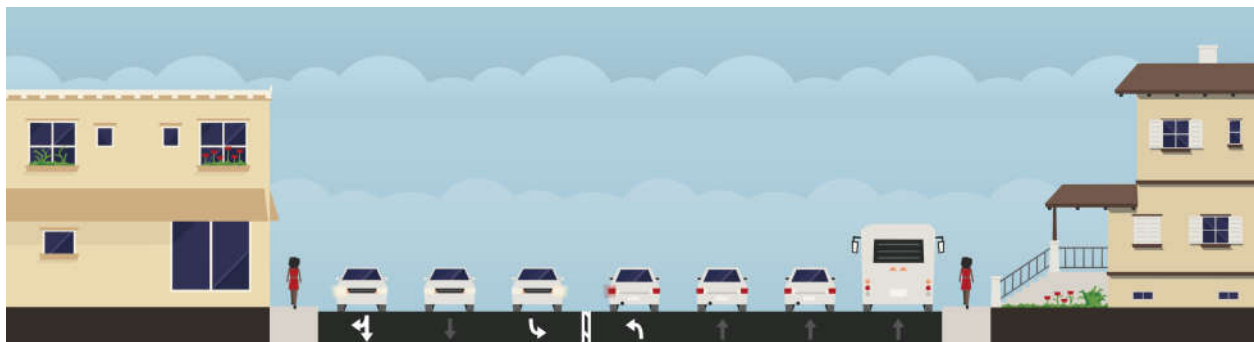


Figure 23: Lomas Blvd at Monroe St

The cross-section of Lomas Blvd east of Monroe to San Mateo would be identical to the cross-section between Washington St and Monroe St. This configuration is displayed in Figure 24.



Figure 24: Lomas Blvd Between Monroe St and San Mateo Blvd

The roadway widens at the Lomas Blvd and San Mateo intersection and resumes raised median separation. The removal of the rightmost eastbound lanes results in queue lengths and delays that are not acceptable. Therefore, the eastbound BAT lane would be discontinued from Manzano St to Madeira Dr to allow passenger vehicles to use the outside lane as a through/right lane. Additionally, a westbound BAT lane is not feasible because there are only two westbound receiving lanes west of the intersection, the resulting cross-section is shown in Figure 25.

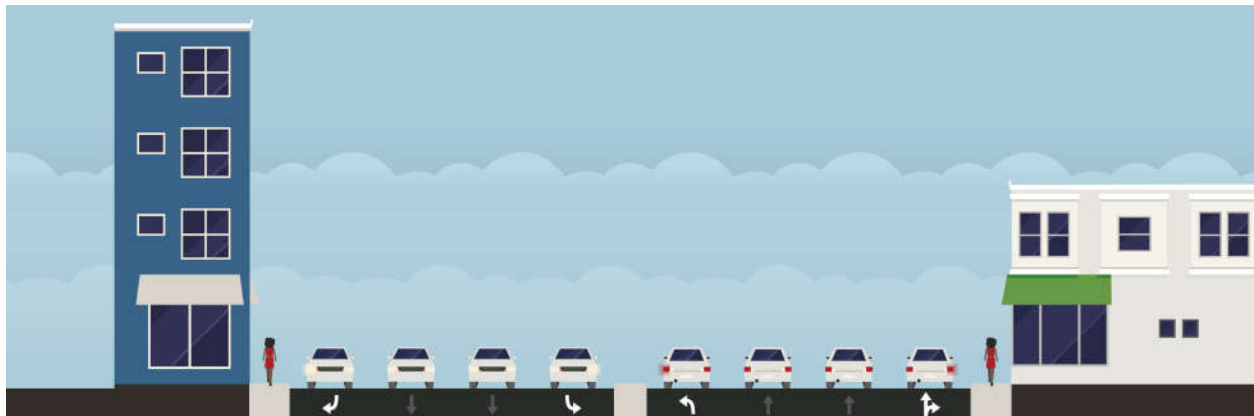


Figure 25: Lomas Blvd at San Mateo Blvd

From San Mateo Blvd to San Pedro Blvd, on Lomas Blvd, the roadway cross-section would continue the transformation of the outer travel lanes into BAT lanes. The Lomas Blvd cross-section from San Mateo Blvd to San Pedro Dr is presented in Figure 26.

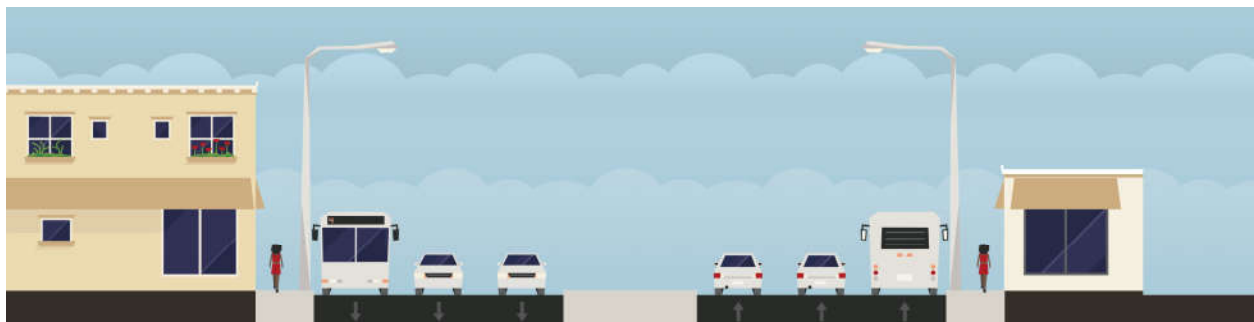


Figure 26: Lomas Blvd Between San Mateo Blvd and San Pedro Dr

The eastern termini of the Lomas Blvd Road Diet would be San Pedro Dr. East of San Pedro Dr, Lomas Blvd would resume operation as a six-lane roadway. At this intersection, the BAT lanes would cease. The intersection configuration is shown in Figure 27.

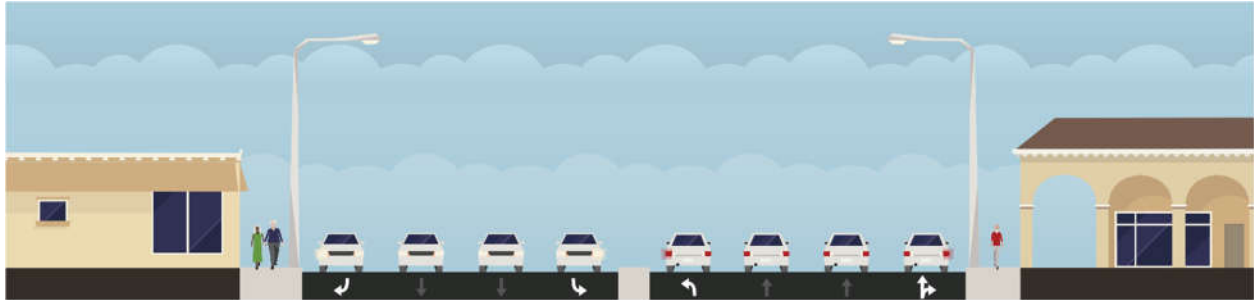


Figure 27: Lomas Blvd at San Pedro Dr

Approaching the intersection westbound, the outer through right lane would be converted into a terminating right-turn-only lane with a BAT lane commencing on the west side of the intersection. In the eastbound direction, the BAT lane would terminate, reopening the third outermost travel lane to regular automobile traffic east of the intersection.

Road Diet Design Concept Summary

In short, the Road Diet Design Concept proposes to reduce travel lanes from three to two on Lomas Blvd where applicable, between Girard Blvd and San Pedro Dr. The lane reduction would be accompanied by the installation of BAT lanes where feasible. If the city chooses to implement a road diet but BAT lanes are not preferred, a road diet could still be implemented using a combination of Green Stormwater Infrastructure (GSI) features, in conjunction with right-turn lanes, as a secondary option.

The construction design for the Road Diet Concept would be conducted based on the methodology and guidance of the following texts:

- FHWA Road Diet Informational Guide (2014 & Updates)
- NACTO Urban Street Design Guide
- NACTO Don't Give Up at the Intersection
- NACTO – Transit Street Design Guide
- MUTCD 11th Edition

The next sections detail the methodology used to assess the existing roadway operational conditions with the potential operations of the corridor under a road diet implementation as compared to the assessed existing operations.

TRAFFIC OPERATIONAL ANALYSIS

The following section covers the evaluation of the existing roadway configuration as well as the evaluation of a Road Diet roadway configuration. The current intersection lane assignments and conditions are documented, followed by a capacity and queuing analysis of the four study scenarios. For reference, the study scenarios were as follows:

- I. **Existing** – conditions based on current TMC data and roadway lane configuration.
- II. **Existing Diverted** – conditions based on TMC data with the addition of Lead and Coal diverted traffic volumes onto the current roadway lane configuration.
- III. **Road Diet** – conditions based on current TMC data and proposed Road Diet lane configuration.
- IV. **Road Diet Diverted** – conditions based on TMC data with the addition of Lead and Coal diverted traffic volumes onto the proposed Road Diet lane configuration.

Please note future case scenarios were not included because the study area is located in a long-established and fully developed part of Albuquerque, and it is reasonable to assume that future city growth will not significantly affect this roadway.

TURNING MOVEMENT COUNTS

To model and evaluate the current conditions of the study corridor, Lee Engineering collected TMC data from the signalized intersections of Lomas Blvd with collector and principal roadways. The TMC data for Girard Blvd, Carlisle Blvd, and Washington St was gathered as part of the Lead and Coal Ave Study efforts on May 8th, 2024. The TMC data collection for San Mateo Blvd and San Pedro Dr was conducted on February 4th, 2025. Traffic east and westbound volumes at the local street intersections with Lomas Blvd at Morningside Dr and Monroe St were calculated from the up and downstream signalized intersections' TMC data, and the side street approach traffic volumes were estimated based on the MRCOG Cube2 Regional Model, and local conditions such as the presence of schools or other traffic generators. The TMCs used in later evaluations and analyses are shown below in Figure 28 through Figure 30

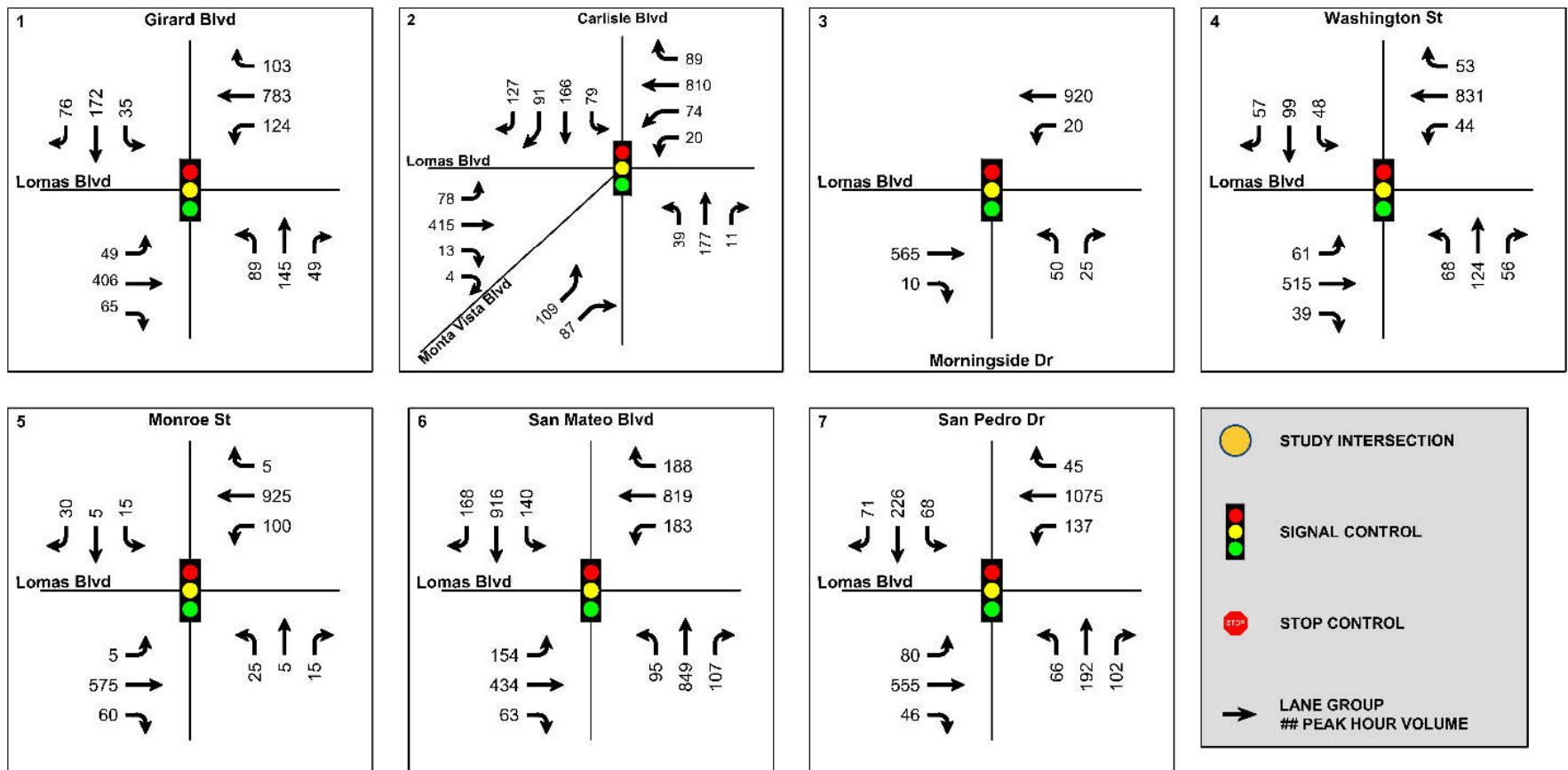
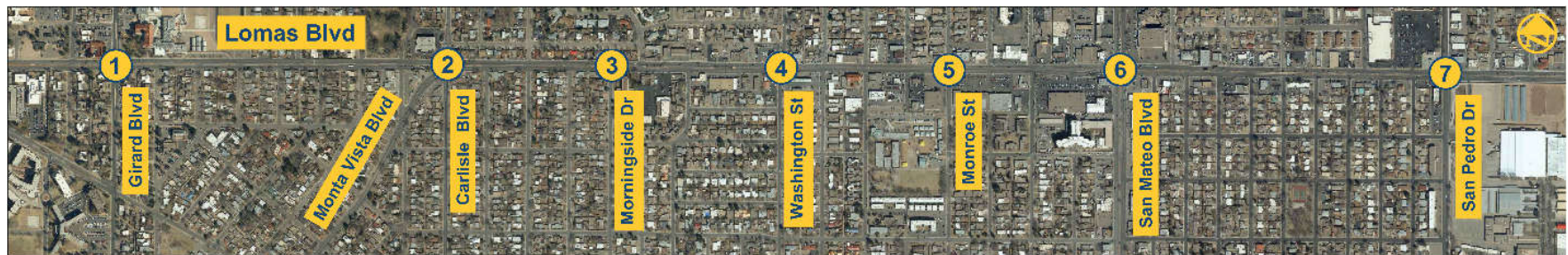


Figure 28: AM Peak Hour Turning Movement Counts

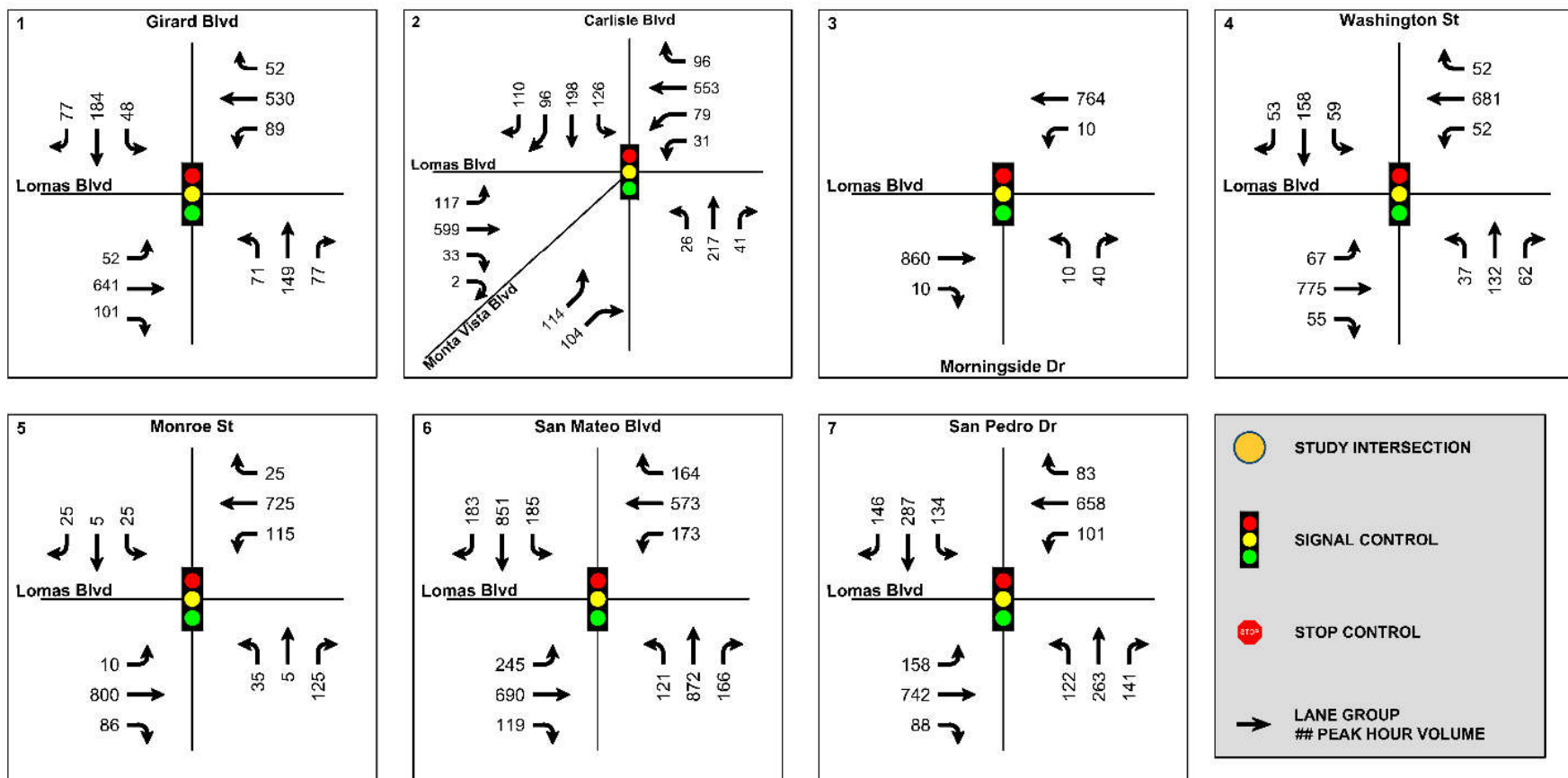


Figure 29: MD Peak Hour Turning Movement Counts

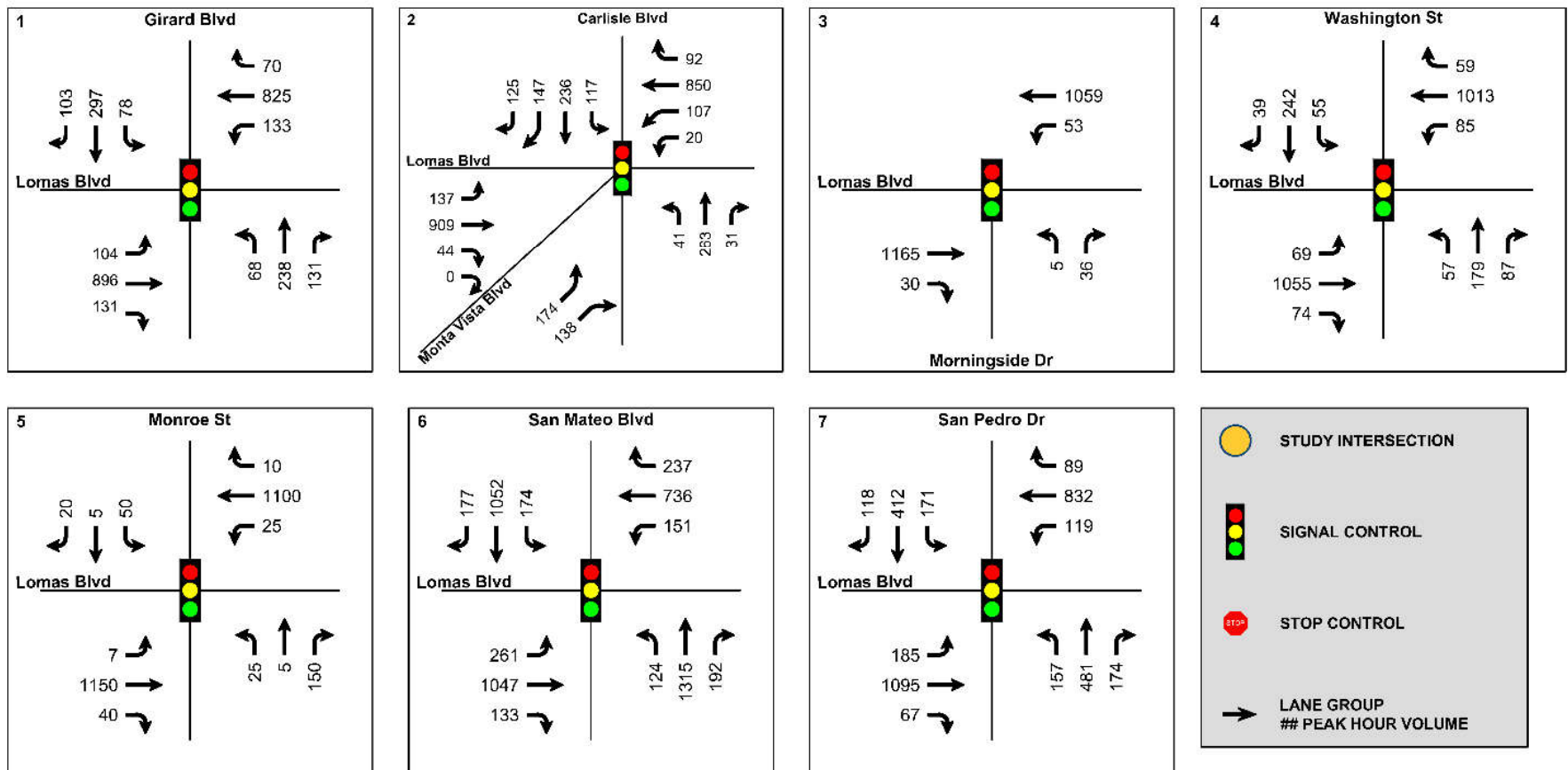
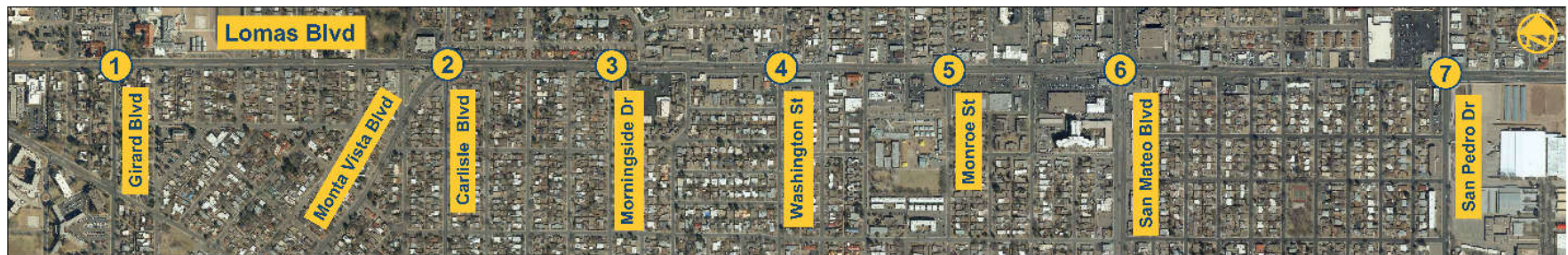


Figure 30: PM Peak Hour Turning Movement Counts

LEAD AND COAL AVE DIVERTED TRAFFIC VOLUMES

This study effort was conducted partially in tandem with the Lead and Coal Study effort. Depending on the outcome of that study and any decisions that stem from it, such as the reduction of the Lead and Coal Ave corridors down to one lane in each direction, it is possible that Lead and Coal Ave traffic may divert to Lomas Blvd. Due to the large travel distance involved in such a diversion for Lead and Coal Ave drivers, it was determined that using 10% of Lead and Coal Ave east and westbound traffic volumes as trips rerouted to Lomas Blvd would be a conservative assumption to assess the potential impact of diverted drivers.

It was further assumed that the trips being made by diverted drivers would originate and terminate south of Lomas Blvd. This assumption results in all diverted trips turning onto Lomas Blvd from the south or turning off of Lomas Blvd to the south. The TMC data collected from Lead and Coal Ave during that study effort was used to determine the east and westbound volumes from which the 10% were being drawn.

The proportions of Lead and Coal Ave traffic volumes that exited that corridor at each analogous intersection were used to determine the diverted trips' distribution onto and off of the Lomas Blvd study corridor. The AM, MD, and PM diverted traffic volumes as assigned and distributed along the Lomas Blvd study corridor are shown in Figure 31 through Figure 33.

The Lead and Coal Ave diverted traffic volumes were added to the previously presented Existing TMC volumes to analyze the Existing Diverted and Road Diet Diverted scenarios. The combined volumes that were used for the two Diverted scenarios are shown in **Figure 34** through **Figure 36**.

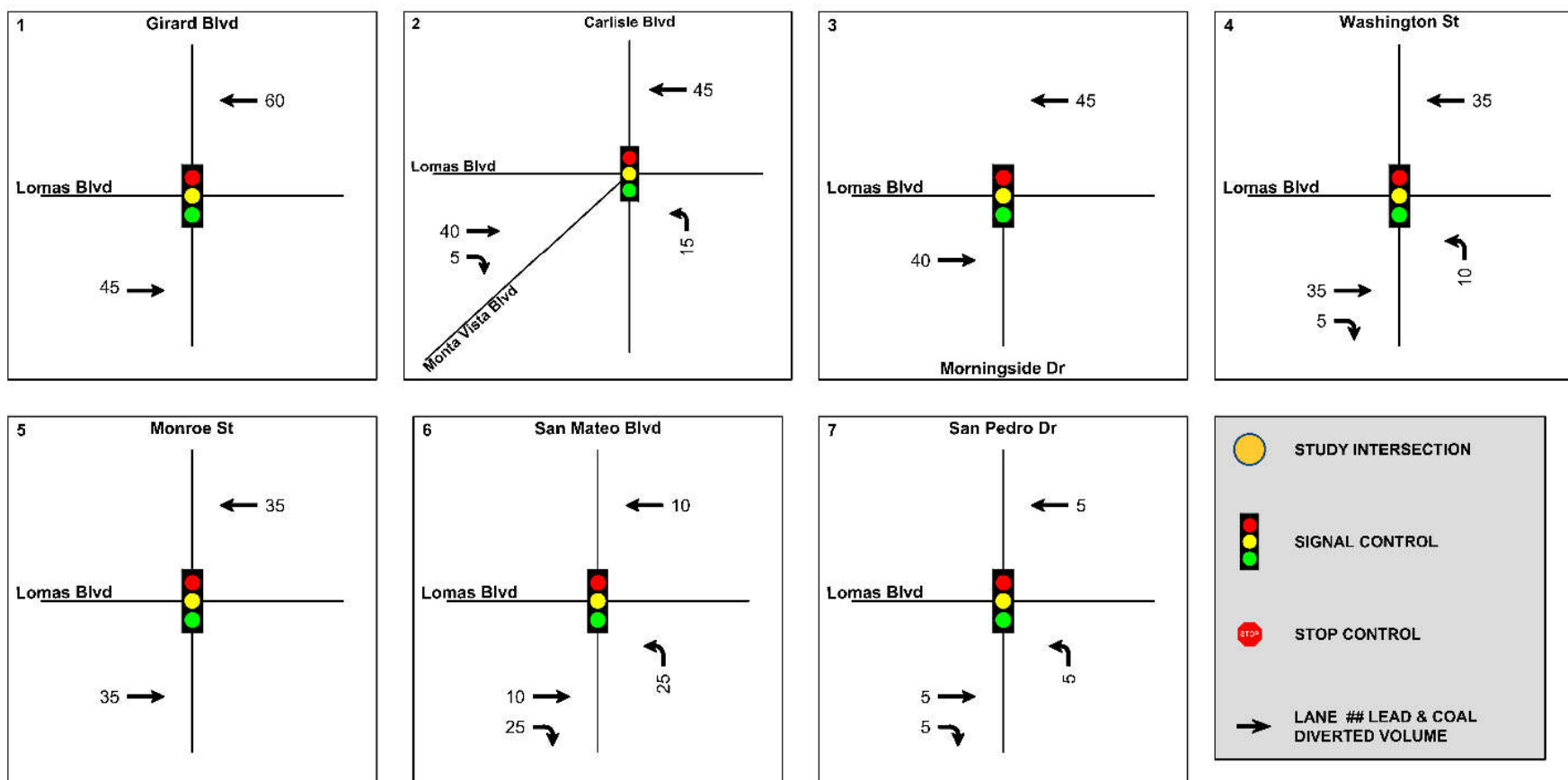


Figure 31: Lead and Coal Ave Diverted Trip Distribution - AM Peak Hour

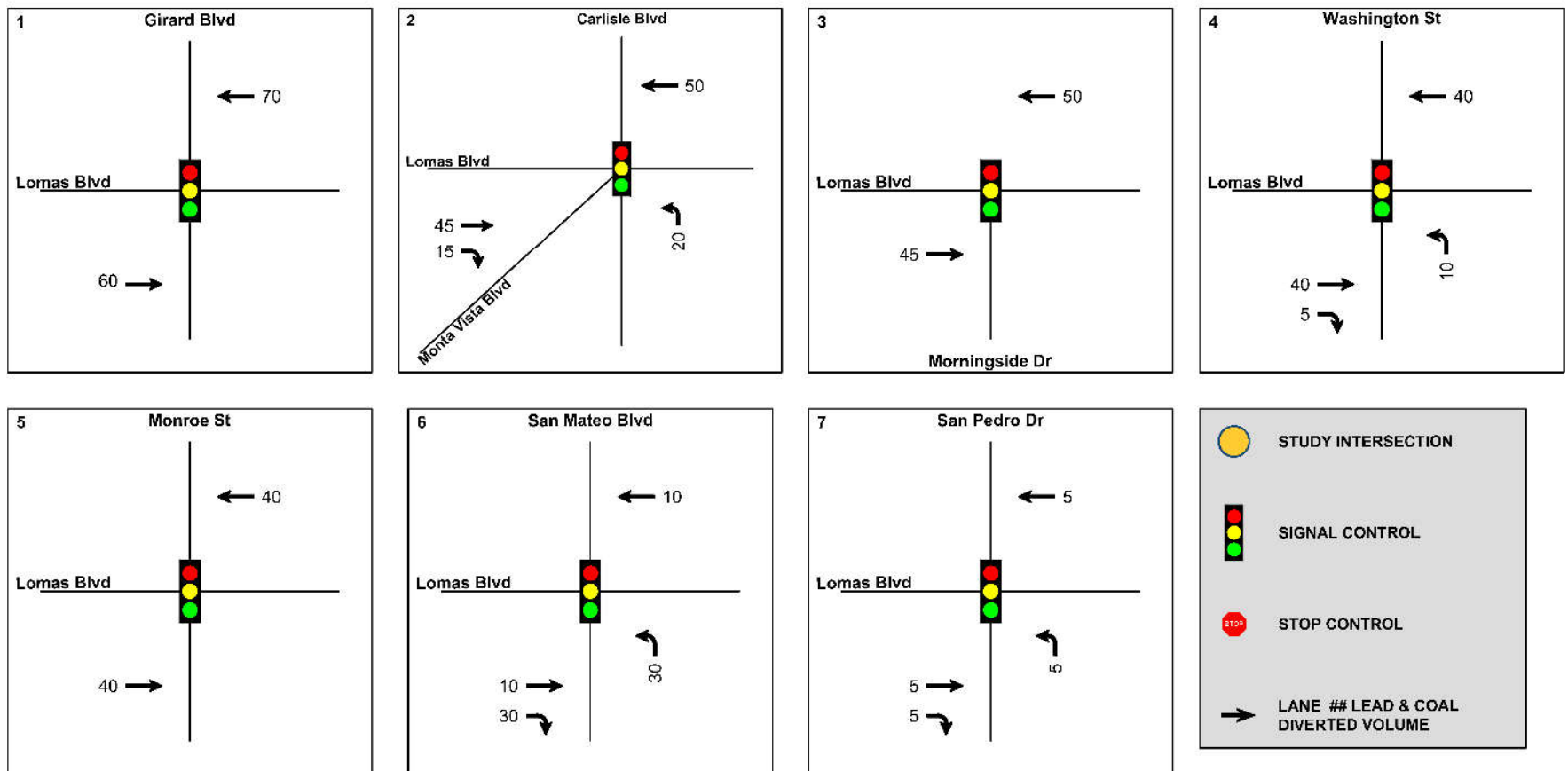
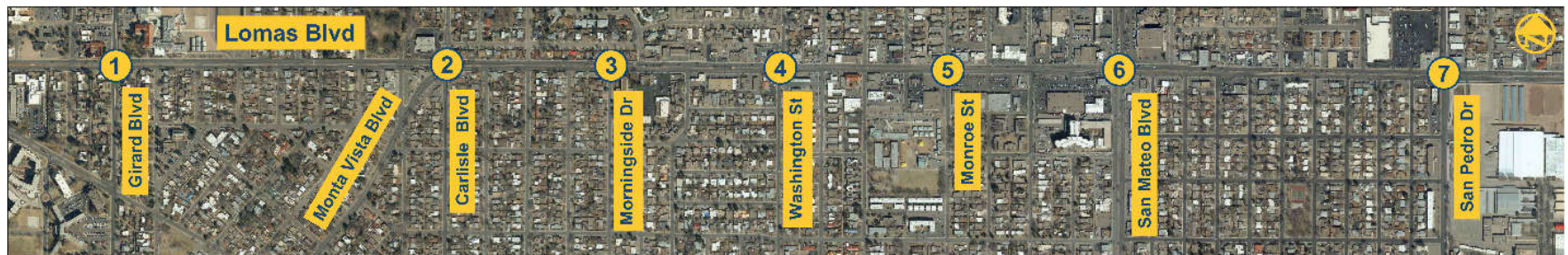


Figure 32: Lead and Coal Ave Diverted Trip Distribution - MD Peak Hour

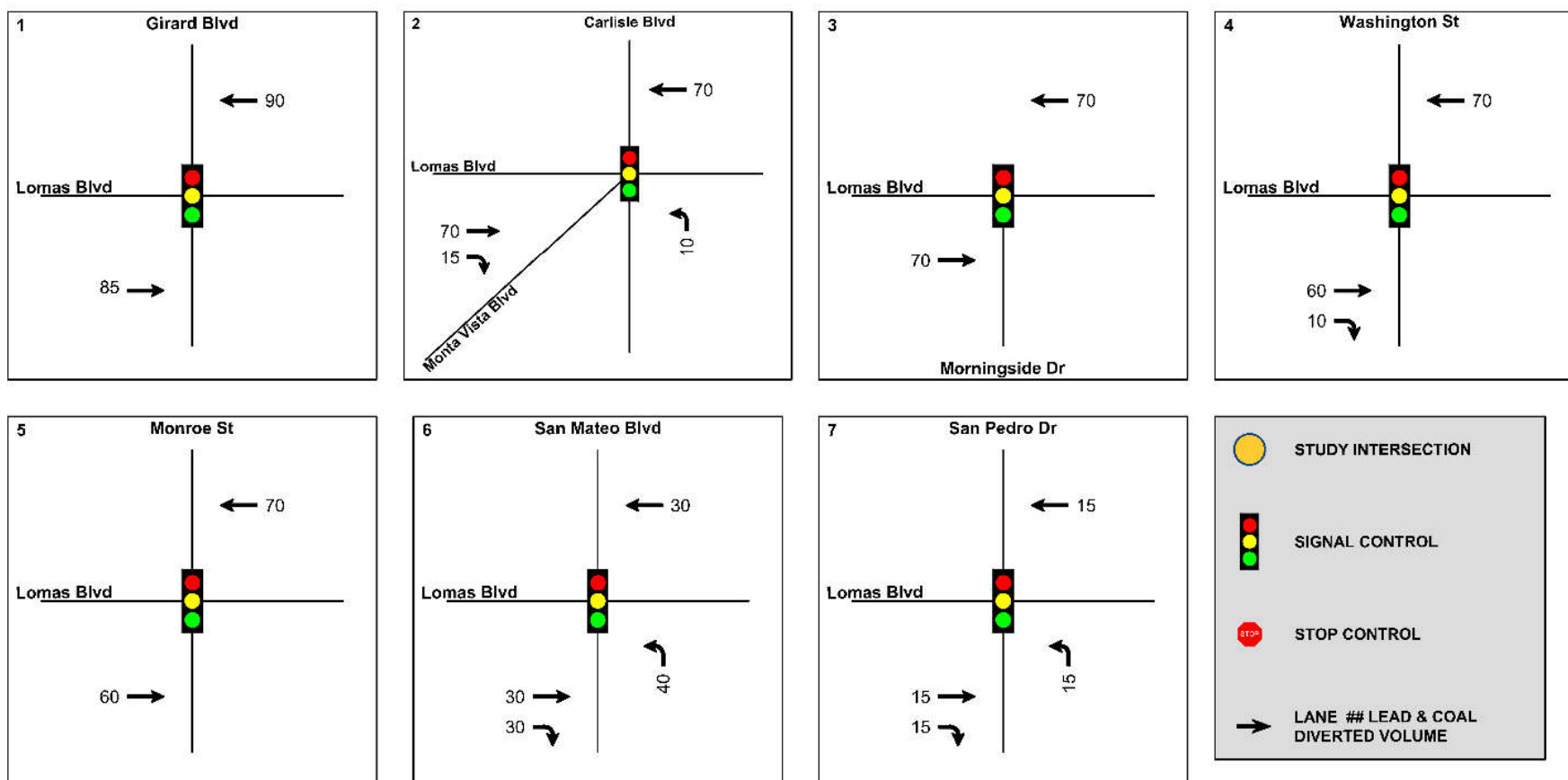


Figure 33: Lead and Coal Ave Diverted Trip Distribution - PM Peak Hour

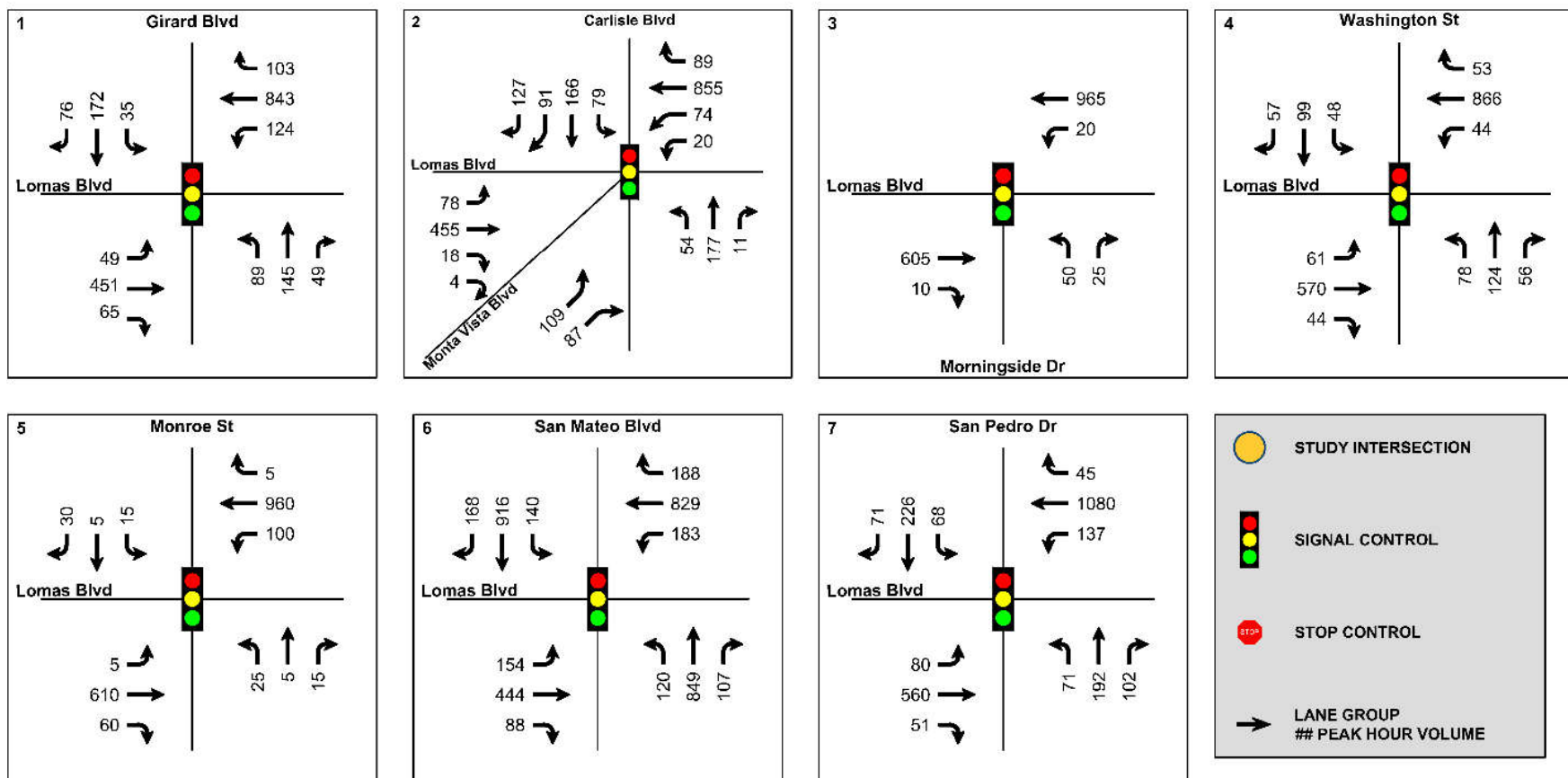


Figure 34: Diverted Scenarios' Turning Movement Volumes - AM Peak Hour

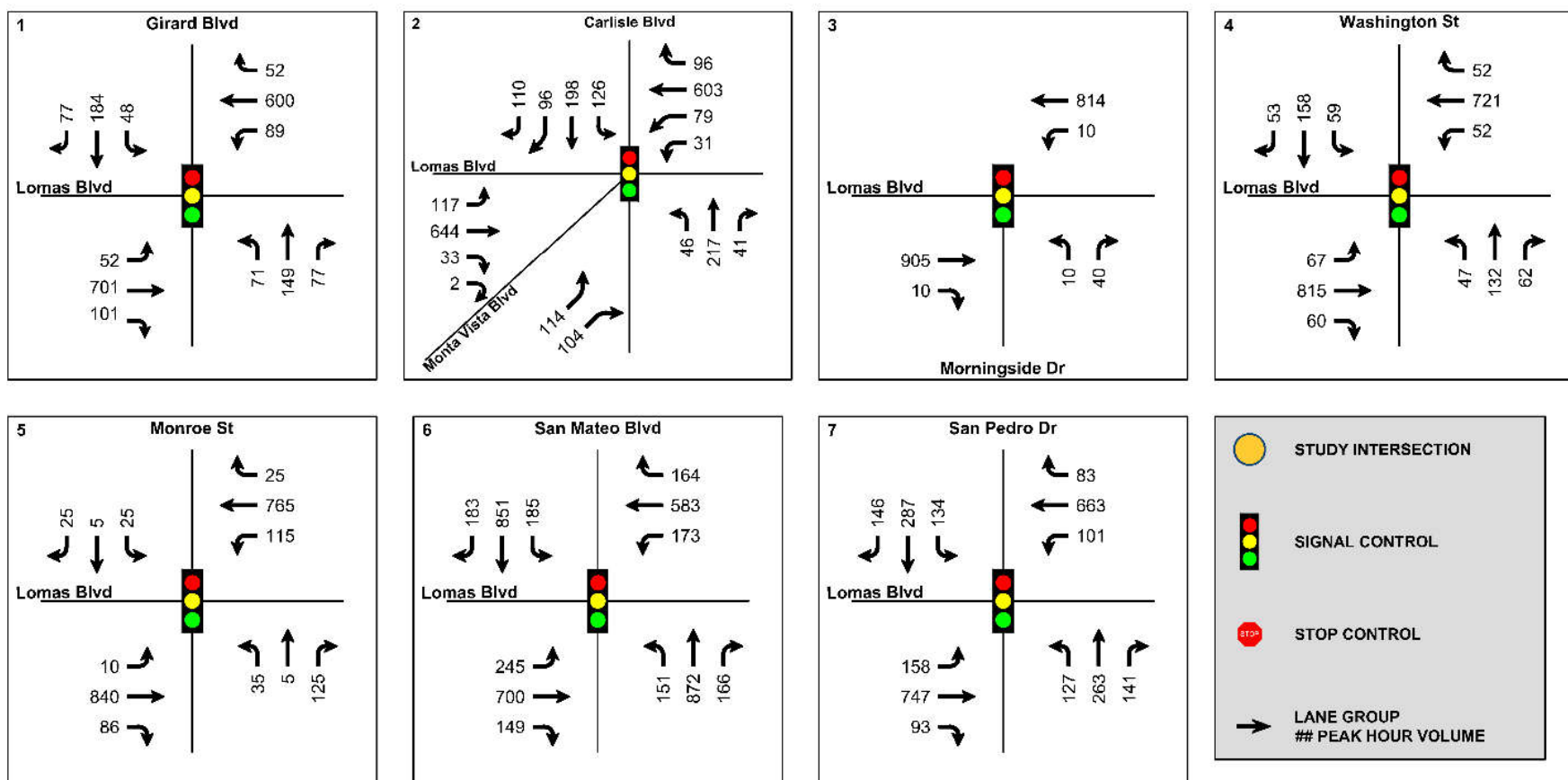


Figure 35: Diverted Scenarios' Turning Movement Volumes - MD Peak Hour

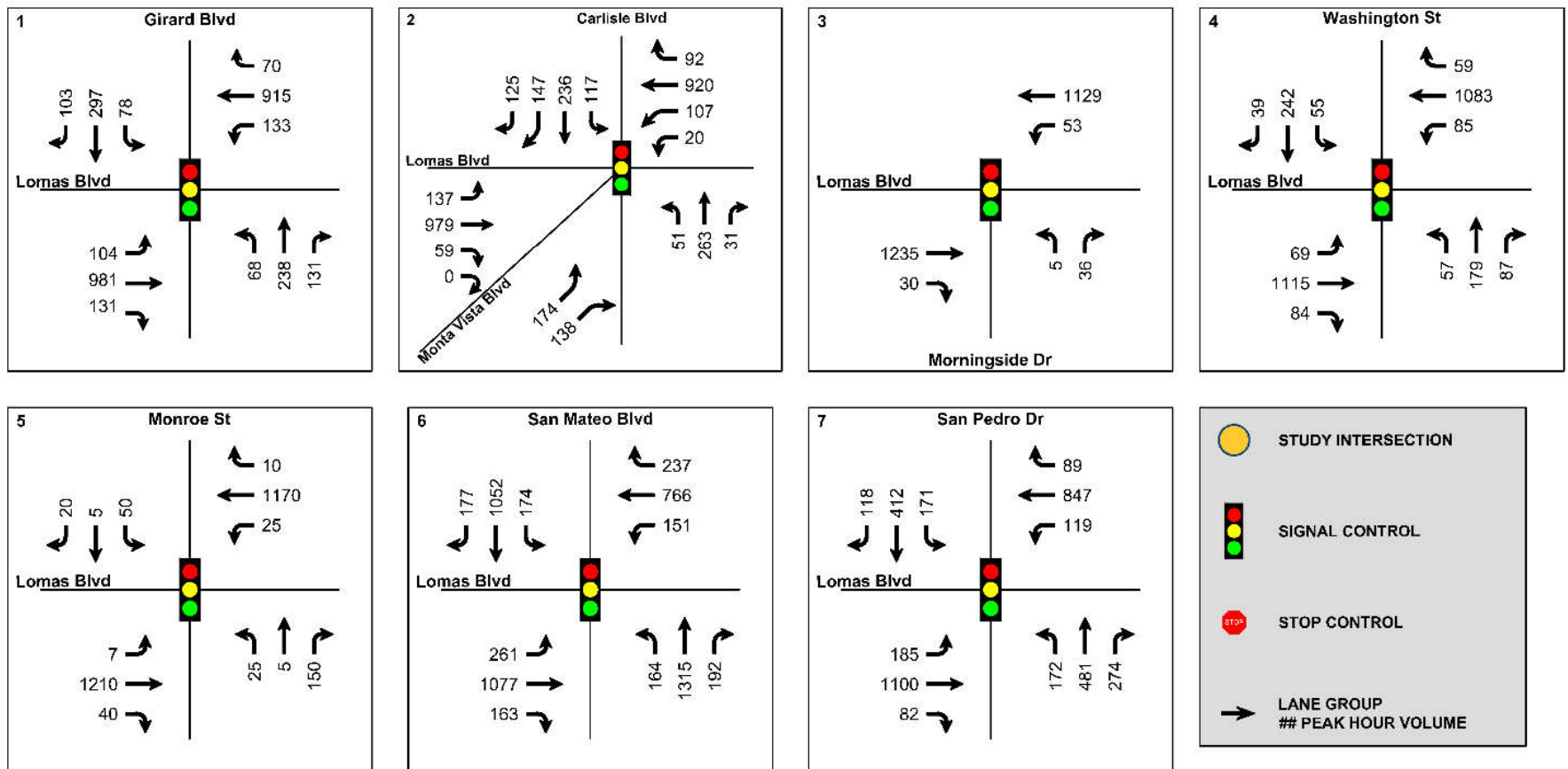
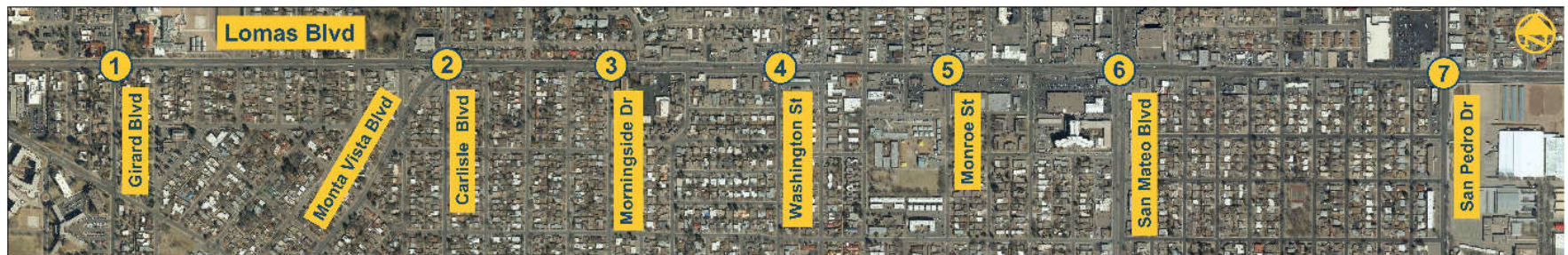


Figure 36: Diverted Scenarios' Turning Movement Volumes - PM Peak Hour

The traffic volumes shown in Figure 28 through Figure 30 were used within the Synchro 12 Traffic software analysis for the Existing and Road Diet scenarios numbered I and III, respectively. The traffic volumes presented by Figure 34 through Figure 36 were used in the analysis of the Existing Diverted and the Road Diet Diverted scenarios numbered II and IV. The following are the results of those evaluations.

CAPACITY AND QUEUING ANALYSIS

Level of Service and Queuing Results Thresholds and Interpretation

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

Table 1 below, reproduced from the HCM, shows delay thresholds and the associated Level of service assigned to delay ranges for signalized intersections and stop-controlled intersections, respectively. Generally, a LOS of D or better is considered an acceptable level of service.

Table 1: LOS Criteria and Descriptions for Signalized Intersections

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

Queueing is reported in feet for all intersections. Queues are reported for queue measurements falling within the 95th percentile. It should be noted that 95th percentile queues are statistically only expected to occur during only 5% of the peak hour's signal cycles.

Detailed output sheets can be found in the appendix. The following subsections detail the results of the Traffic Operational Analysis for each of the four study scenarios. The results are grouped and presented by intersection rather than by scenario to facilitate easy comparison between scenarios.

Girard Blvd - Capacity and Queuing Results

For the Existing conditions model, Lomas Blvd was modeled with the current six lanes east of Girard Blvd, and for the Road Diet model, Lomas was modeled with four lanes east of Girard. The results of the Existing scenario and the Road Diet model are presented below in Table 2

Table 2: Lomas Blvd and Girard Blvd Existing and Road Diet Result Summary

Girard Blvd & Lomas Blvd																												
Existing																												
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS						
AM	EBL	13	36	NO	11.0	B	B	MD	EBL	13	36	NO	9.8	A	B	PM	EBL	38	67	NO	15.3	B	C	C	C			
	EBT/R	61	107	NO	15.1	B			EBT/R	96	155	NO	14.0	B			EBT/R	205	259	NO	22.9	C						
	WBL	10	16	NO	2.9	A			WBL	6	15	NO	3.7	A			WBL	32	68	NO	20.5	C						
	WBR/T	26	32	NO	2.9	A			WBR/T	17	22	NO	2.8	A			WBR/T	30	32	NO	3.8	A						
	NBL	49	77	NO	29.9	C			NBL	37	64	NO	30.2	C			NBL	34	66	NO	28.5	C						
	NBT/R	121	177	NO	36.9	D			NBT/R	137	201	NO	44.9	D			NBT/R	256	417	YES	50.0	D						
	SBL	18	37	NO	24.9	C			SBL	25	47	NO	27.2	C			SBL	40	75	NO	28.3	C						
	SBT/R	168	241	NO	56.6	E			SBT/R	170	244	NO	56.7	E			SBT/R	289	469	YES	54.7	D						
Road Diet																												
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS					50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS					50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				
AM	EBL	13	36	NO	11.0	B	B	MD	EBL	13	36	NO	9.8	A	B	PM	EBL	38	67	NO	15.5	B	C	C	C			
	EBT	83	148	NO	16.8	B			EBT	130	215	NO	15.6	B			EBT	282	366	NO	25.9	C						
	EBR	0	16	NO	2.3	A			EBR	0	32	NO	3.8	A			EBR	0	38	NO	4.1	A						
	WBL	10	16	NO	2.8	A			WBL	6	11	NO	3.2	A			WBL	31	m66	NO	19.5	B						
	WBT	37	47	NO	3.9	A			WBT	25	33	NO	3.2	A			WBT	44	46	NO	5.4	A						
	WBR	0	0	NO	0.3	A			WBR	0	0	NO	0.1	A			WBR	1	m0	NO	0.2	A						
	NBL	49	77	NO	29.9	C			NBL	37	64	NO	30.2	C			NBL	34	66	NO	28.5	C						
	NBT/R	121	177	NO	36.9	D			NBT/R	137	201	NO	44.9	D			NBT/R	256	417	YES	50.0	D						
	SBL	18	37	NO	24.9	C			SBL	25	47	NO	27.2	C			SBL	40	75	NO	28.3	C						
	SBT/R	168	241	NO	56.6	E			SBT/R	170	244	NO	56.7	E			SBT/R	289	469	YES	54.7	D						

From Table 2, due to the constriction from three through lanes down to two on the eastbound approach, the delay and queue lengths for the eastbound movement increase slightly between the Existing and the Road Diet conditions. This is the only notable difference at this intersection, and the overall LOS is consistent between the two scenarios.

The results for the Existing Diverted and Road Diet Diverted scenarios are presented next in Table 3.

Table 3: Lomas Blvd and Girard Blvd Existing Diverted and Road Diet Diverted Result Summary

Girard Blvd & Lomas Blvd																												
Existing - With Diverted Lead & Coal Ave Traffic																												
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS						
AM	EBL	13	36	NO	11.2	B	B	MD	EBL	13	36	NO	9.9	A	B	PM	EBL	38	67	NO	16.0	B	C	C	C	C		
	EBT/R	69	118	NO	15.4	B			EBT/R	106	170	NO	14.3	B			EBT/R	228	286	NO	23.6	C						
	WBL	10	18	NO	3.3	A			WBL	8	17	NO	4.0	A			WBL	37	69	NO	25.7	C						
	WBT/R	31	37	NO	3.3	A			WBT/R	22	28	NO	3.0	A			WBT/R	35	37	NO	4.3	A						
	NBL	49	77	NO	29.9	C			NBL	37	64	NO	30.2	C			NBL	34	66	NO	28.5	C						
	NBT/R	121	177	NO	36.9	D			NBT/R	137	201	NO	44.9	D			NBT/R	256	417	YES	50.0	D						
	SBL	18	37	NO	24.9	C			SBL	25	47	NO	27.2	C			SBL	40	75	NO	28.3	C						
	SBT/R	168	241	NO	56.6	E			SBT/R	170	244	NO	56.7	E			SBT/R	289	469	YES	54.7	D						
Road Diet - With Diverted Lead & Coal Ave Traffic																												
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS					50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS					50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS				
AM	EBL	13	36	NO	11.1	B	B	MD	EBL	13	36	NO	9.9	A	B	PM	EBL	38	67	NO	16.4	B	C	C	C	C		
	EBT	94	165	NO	17.0	B			EBT	144	238	NO	15.9	B			EBT	319	417	NO	27.3	C						
	EBR	0	16	NO	2.3	A			EBR	0	32	NO	3.8	A			EBR	0	39	NO	4.2	A						
	WBL	10	18	NO	3.1	A			WBL	8	15	NO	3.4	A			WBL	38	m71	NO	27.1	C						
	WBT	43	53	NO	4.6	A			WBT	32	41	NO	3.5	A			WBT	50	82	NO	6.4	A						
	WBR	0	0	NO	0.3	A			WBR	0	m0	NO	0.1	A			WBR	1	0	NO	0.2	A						
	NBL	49	77	NO	29.9	C			NBL	37	64	NO	30.2	C			NBL	34	66	NO	28.5	C						
	NBT/R	121	177	NO	36.9	D			NBT/R	137	201	NO	44.9	D			NBT/R	256	#417	YES	50.0	D						
	SBL	18	37	NO	24.9	C			SBL	25	47	NO	27.2	C			SBL	40	75	NO	28.3	C						
	SBT/R	168	241	NO	56.6	E			SBT/R	170	244	NO	56.7	E			SBT/R	289	#469	YES	54.7	D						

From Table 3, the additional traffic volumes potentially added by drivers diverting from Lead and Coal Avenues in the case of a lane reduction on that corridor would not have a significant impact on operations at this study intersection. Overall lane group LOSs remain consistent.

Carlisle Blvd/Monte Vista Blvd - Capacity and Queuing Results

At the intersection of Carlisle Blvd with Lomas Blvd, the unique intersection configuration made the operations more sensitive to lane reduction. The split-phase operations required by the five-leg approach necessitated the presence of the third outside through/right lane for the westbound approach and the continuance of that westbound receiving lane. Thus, the westbound lane reduction terminates at Solano Dr to provide sufficient capacity at the intersection. The lane reduction resumes for eastbound traffic at Tulane Dr. Table 4 shows the results for the Carlisle Blvd and Lomas Blvd intersection.

Table 4: Lomas Blvd and Carlisle Blvd Existing and Road Diet Result Summary

Carlisle Blvd, Monte Vista Blvd & Lomas Blvd																															
Existing																															
Queuing Results								Delay and Level of Service								Queuing Results								Delay and Level of Service							
Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS								
AM	EBL	16	30	NO	15.1	B	C	MD	EBL	61	34	NO	16.4	B	C	PM	EBL	38	m60	NO	27.1	C	D								
	EBT/R	93	143	NO	21.5	B			EBT/R	150	200	NO	27.4	C			EBT/R	275	#373	NO	36.0	D									
	WBL	40	86	NO	21.3	C			WBL	52	95	YES	25.2	C			WBL	69	116	YES	38.0	D									
	WBT/R	196	286	NO	31.2	C			WBT/R	140	194	NO	33.6	C			WBT/R	259	#358	YES	47.1	D									
	NBL	26	58	NO	42.7	D			NBL	17	45	NO	41.6	D			NBL	29	64	NO	44.6	D									
	NBT/R	136	#232	YES	67.8	E			NBT/R	171	#340	YES	67.2	E			NBT/R	237	#440	YES	77.9	E									
	SBL	55	100	NO	47.4	D			SBL	85	143	NO	50.8	D			SBL	85	149	NO	51.7	D									
	SBT	122	190	NO	63.7	E			SBT	138	214	NO	64.4	E			SBT	183	#325	YES	76.5	E									
	SB - SWB R	52	86	NO	29.4	C			SB - SWB R	52	86	NO	28.5	C			SB - SWB R	84	137	NO	30.5	C									
	SBR	0	40	NO	5.4	A			SBR	0	34	NO	4.9	A			SBR	0	41	NO	5.2	A									
NEBL	80	134	NO	60.6	E	NEBL	80	134	NO	60.6	E	NEBL	137	210	NO	71.6	E														
NEBR	35	61	NO	47.3	D	NEBR	0	3	NO	1.9	A	NEBR	58	92	NO	50.1	D														
Road Diet																															
Queuing Results								Delay and Level of Service								Queuing Results								Delay and Level of Service							
Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS								
AM	EBL	15	28	NO	14.7	B	C	MD	EBL	52	32	NO	15.8	B	C	PM	EBL	33	m81	NO	30.1	C	D								
	EBT/R	93	143	NO	20.3	C			EBT/R	150	200	NO	26.3	C			EBT/R	275	#372	YES	34.0	C									
	WBL	40	86	NO	21.3	C			WBL	52	95	NO	25.2	C			WBL	69	116	NO	38.0	D									
	WBT/R	196	286	NO	31.2	C			WBT/R	140	194	NO	33.6	D			WBT/R	259	#358	YES	47.1	D									
	NBL	26	58	NO	42.7	D			NBL	17	45	NO	41.6	D			NBL	29	64	NO	44.6	D									
	NBT/R	136	#232	YES	67.8	E			NBT/R	171	#340	YES	67.2	E			NBT/R	237	#440	YES	77.9	E									
	SBL	55	100	NO	47.4	D			SBL	85	143	NO	50.8	D			SBL	85	149	NO	51.7	D									
	SBT	122	190	NO	63.7	E			SBT	138	214	NO	64.4	E			SBT	183	325	YES	76.5	E									
	SB - SWB R	52	86	NO	29.4	C			SB - SWB R	52	86	NO	28.5	C			SB - SWB R	84	137	NO	30.5	C									
	SBR	0	40	NO	5.4	A			SBR	0	34	NO	4.9	A			SBR	0	41	NO	5.2	A									
NEBL	80	134	NO	60.6	E	NEBL	80	134	NO	60.6	E	NEBL	137	210	NO	71.6	E														
NEBR	35	61	NO	47.3	D	NEBR	0	3	NO	1.9	A	NEBR	58	92	NO	50.1	D														

From Table 4, AM and MD results for both scenarios are consistent, with only minor increases in delay and queue lengths. Overall LOS results are unchanged between the Existing and the Road Diet scenarios. Table 5, presents the results of the Existing and Road Diet configurations with the potential additional trips from diverted Lead and Coal Avenue traffic.

Table 5: Lomas Blvd and Carlisle Blvd Existing Diverted and Road Diet Diverted Result Summary

Carlisle Blvd, Monte Vista Blvd & Lomas Blvd																															
Existing - With Diverted Lead & Coal Ave Traffic																															
Time		Movement		Queuing Results			Delay and Level of Service			Time		Movement		Queuing Results			Delay and Level of Service			Time		Movement		Queuing Results			Delay and Level of Service				
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	15	28	NO	15.1	B	C	MD	EBL	59	33	NO	16.3	B	C	PM	EBL	35	m66	NO	27.5	C	D								
	EBT/R	104	156	NO	21.0	B			EBT/R	161	215	NO	27.2	C			EBT/R	304	#427	YES	38.3	D									
	WBL	40	86	NO	21.4	C			WBL	52	95	YES	25.6	C			WBL	69	116	YES	38.0	D									
	WBT/R	209	#307	YES	31.8	C			WBT/R	154	210	NO	34.4	C			WBT/R	285	#404	YES	49.7	D									
	NBL	36	75	NO	44.0	D			NBL	29	68	NO	44.0	D			NBL	36	75	NO	45.0	D									
	NBT/R	136	#232	YES	67.8	E			NBT/R	171	#340	YES	67.2	E			NBT/R	237	#440	YES	77.9	E									
	SBL	55	100	NO	47.4	D			SBL	85	143	NO	50.8	D			SBL	85	149	NO	51.7	D									
	SBT	122	190	NO	63.7	E			SBT	138	214	NO	64.4	E			SBT	183	#325	YES	76.5	E									
	SB - SWB R	52	86	NO	29.4	C			SB - SWB R	52	86	NO	28.5	C			SB - SWB R	84	137	NO	30.5	C									
	SBR	0	40	NO	5.4	A			SBR	0	34	NO	4.9	A			SBR	0	41	NO	5.2	A									
NEBL	80	134	NO	60.6	E	NEBL	80	134	NO	60.6	E	NEBL	137	210	NO	71.6	E														
NEBR	35	61	NO	47.3	D	NEBR	0	3	NO	1.9	A	NEBR	58	92	NO	50.1	D														
Road Diet - With Diverted Lead & Coal Ave Traffic																															
Time		Movement		Queuing Results			Delay and Level of Service			Time		Movement		Queuing Results			Delay and Level of Service			Time		Movement		Queuing Results			Delay and Level of Service				
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	14	26	NO	14.9	B	C	MD	EBL	48	31	NO	15.7	B	C	PM	EBL	31	m86	NO	31.5	C	D								
	EBT/R	103	156	NO	19.9	B			EBT/R	165	219	NO	26.2	C			EBT/R	304	#427	YES	35.7	D									
	WBL	40	86	NO	21.4	C			WBL	52	95	NO	25.7	C			WBL	69	116	NO	38.0	D									
	WBT/R	209	#307	YES	31.8	C			WBT/R	154	210	NO	34.4	C			WBT/R	285	#404	NO	49.7	D									
	NBL	36	75	NO	44.0	D			NBL	29	68	NO	44.0	D			NBL	36	75	NO	45.0	D									
	NBT/R	136	#232	YES	67.8	E			NBT/R	171	#340	YES	67.2	E			NBT/R	237	#440	YES	77.9	E									
	SBL	55	100	NO	47.4	D			SBL	85	143	NO	50.8	D			SBL	85	149	NO	51.7	D									
	SBT	122	190	NO	63.7	E			SBT	138	214	NO	64.4	E			SBT	183	#325	YES	76.5	E									
	SB - SWB R	52	86	NO	29.4	C			SB - SWB R	52	86	NO	28.5	C			SB - SWB R	84	137	NO	30.5	C									
	SBR	0	40	NO	5.4	A			SBR	0	34	NO	4.9	A			SBR	0	41	NO	5.2	A									
NEBL	80	134	NO	60.6	E	NEBL	80	134	NO	60.6	E	NEBL	137	210	NO	71.6	E														
NEBR	35	61	NO	47.3	D	NEBR	0	3	NO	1.9	A	NEBR	58	92	NO	50.1	D														

Table 5 shows that the diverted traffic volumes result in operational performance that is very similar to the corresponding non-diverted results. The results show only a minor difference between traffic operations if drivers diverted from Lead and Coal Avenues.

Morningside Dr - Capacity and Queuing Results

Below are the results for Existing and Road Diet results for the Morningside Dr and Lomas Blvd intersection. The lane reductions east and westbound continue for the Road Diet configuration at this intersection. In that scenario, eastbound consists of two through lanes and a dedicated right-turn lane, and the westbound approach has two through lanes and a dedicated left-turn lane. The results of these scenarios are displayed in Table 6.

Table 6: Lomas Blvd and Morningside Dr Existing and Road Diet Result Summary

Morningside Dr & Lomas Blvd																							
Existing																							
		Queuing Results			Delay and Level of Service					Queuing Results			Delay and Level of Service					Queuing Results			Delay and Level of Service		
Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBT/R	21	31	NO	2.5	A	A	MD	EBT/R	0	45	NO	1.8	A	A	PM	EBT/R	0	66	NO	2.0	A	A
	WBL	2	7	NO	3.3	A			WBL	0	4	NO	2.7	A			WBL	0	17	NO	3.7	A	
	WBT	36	52	NO	2.8	A			WBT	0	39	NO	1.8	A			WBT	0	58	NO	1.9	A	
	NBL	19	38	NO	22.9	C			NBL	3	14	NO	22.0	C			NBL	1	10	NO	22.6	C	
	NBR	0	16	NO	10.0	B			NBR	0	21	NO	10.1	B			NBR	0	22	NO	11.0	B	
Road Diet																							
		Queuing Results			Delay and Level of Service					Queuing Results			Delay and Level of Service					Queuing Results			Delay and Level of Service		
Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS
AM	EBT	31	49	NO	2.8	A	A	MD	EBT	0	74	NO	2.2	A	A	PM	EBT	0	114	NO	2.6	A	A
	EBR	0	3	NO	1.9	A			EBR	0	3	NO	1.7	A			EBR	0	5	NO	1.2	A	
	WBL	2	7	NO	3.3	A			WBL	0	4	NO	2.6	A			WBL	0	17	NO	3.6	A	
	WBT	59	87	NO	3.3	A			WBT	0	64	NO	2.1	A			WBT	0	99	NO	2.4	A	
	NBL	19	38	NO	22.9	C			NBL	3	14	NO	22.0	C			NBL	1	10	NO	22.6	C	
	NBR	0	16	NO	10.0	B			NBR	0	21	NO	10.1	B			NBR	0	22	NO	11.0	B	

Table 6 shows that there is a slight, almost negligible difference in delay and queue lengths between the Existing and Road Diet configurations at this intersection. Table 7 shows the results of the Existing and Road Diet configurations with the potential diverted traffic from Lead and Coal Avenues.

Table 7: Lomas Blvd and Morningside Dr Existing Diverted and Road Diet Diverted Result Summary

Morningside Dr & Lomas Blvd																										
Existing - With Diverted Lead & Coal Ave Traffic																										
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service			
		50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			
AM	EBT/R	22	33	NO	2.5	A	A	MD	EBT/R	0	48	NO	1.9	A	A	PM	EBT/R	0	71	NO	2.0	A	A			
	WBL	2	7	NO	3.4	A			WBL	0	4	NO	2.7	A			WBL	0	18	NO	4.0	A				
	WBT	39	54	NO	2.8	A			WBT	0	42	NO	1.8	A			WBT	0	62	NO	1.9	A				
	NBL	19	38	NO	22.9	C			NBL	3	14	NO	22.0	C			NBL	1	10	NO	22.6	C				
	NBR	0	16	NO	10.0	B			NBR	0	21	NO	10.1	B			NBR	2	24	NO	13.3	B				
Road Diet - With Diverted Lead & Coal Ave Traffic																										
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service			
		50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			
AM	EBT	34	53	NO	2.9	A	A	MD	EBT	0	79	NO	2.3	A	A	PM	EBT	0	125	NO	2.7	A	A			
	EBR	0	3	NO	1.9	A			EBR	0	3	NO	1.7	A			EBR	0	5	NO	1.2	A				
	WBL	2	7	NO	3.3	A			WBL	0	4	NO	2.7	A			WBL	0	18	NO	3.9	A				
	WBT	63	93	NO	3.4	A			WBT	0	70	NO	2.2	A			WBT	0	108	NO	2.5	A				
	NBL	19	38	NO	22.9	C			NBL	3	14	NO	22.0	C			NBL	1	10	NO	22.6	C				
	NBR	0	16	NO	10.0	B			NBR	0	21	NO	10.1	B			NBR	2	24	NO	13.3	B				

The diverted volumes from Lead and Coal Avenues had little effect on the delay and queue length results as compared with the non-diverted scenarios.

Washington St - Capacity and Queuing Results

The following are the capacity and queue length results for the Lomas Blvd and Washington St intersection. At this intersection, the westbound approach is two through lanes and a dedicated left-turn lane in both Existing and Road Diet configurations. The eastbound approach continues

the lane reduction from three to two lanes from the Existing to Road Diet conditions. Results for the two scenarios are shown in Table 8.

Table 8: Lomas Blvd and Washington St Existing and Road Diet Result Summary

Washington St & Lomas Blvd																										
Existing																										
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	50th % (ft)				95th % (ft)	Spillback	Delay (s/veh)	LOS	50th % (ft)	95th % (ft)				Spillback	Delay (s/veh)	LOS				
AM	EBL	10	29	NO	5.1	A	B	MD	EBL	11	32	NO	5.3	A	B	PM	EBL	16	49	NO	9.6	A	B			
	EBT/R	31	53	NO	3.5	A			EBT/R	51	85	NO	4.3	A			EBT/R	97	154	NO	6.6	A				
	WBL	4	10	NO	2.5	A			WBL	5	11	NO	2.8	A			WBL	9	14	NO	6.1	A				
	WBT/R	47	53	NO	2.5	A			WBT/R	37	44	NO	2.4	A			WBT/R	59	58	NO	3.8	A				
	NBL	49	94	NO	66.4	E			NBL	25	56	NO	52.7	D			NBL	39	81	NO	67.8	E				
	NBT/R	117	183	NO	55.6	E			NBT/R	119	183	NO	50.5	D			NBT/R	171	242	NO	50.1	D				
	SBL	34	72	NO	63.4	E			SBL	40	81	NO	60.3	E			SBL	37	75	NO	56.5	E				
	SBT/R	94	154	NO	47.0	D			SBT/R	136	204	NO	56.5	E			SBT/R	194	265	NO	55.7	E				
Road Diet																										
Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS	Time	Movement	Queuing Results			Delay and Level of Service			Overall LOS
		50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	50th % (ft)				95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	50th % (ft)	95th % (ft)				Spillback Rate	Delay (s/veh)	LOS				
AM	EBL	10	29	NO	5.1	A	B	MD	EBL	11	32	NO	5.3	A	B	PM	EBL	16	47	NO	9.6	A	B			
	EBT	44	78	NO	3.9	A			EBT	76	128	NO	4.9	A			EBT	147	240	NO	7.8	A				
	EBR	0	9	NO	1.4	A			EBR	0	11	NO	1.4	A			EBR	0	16	NO	1.7	A				
	WBL	4	10	NO	2.4	A			WBL	5	11	NO	2.7	A			WBL	9	14	NO	5.7	A				
	WBT/R	47	54	NO	2.5	A			WBT/R	37	44	NO	2.4	A			WBT/R	59	58	NO	3.8	A				
	NBL	49	94	NO	66.4	E			NBL	25	56	NO	52.7	D			NBL	39	81	NO	67.8	E				
	NBT/R	117	183	NO	55.6	E			NBT/R	119	183	NO	50.5	D			NBT/R	171	242	NO	50.1	D				
	SBL	34	72	NO	63.4	E			SBL	40	81	NO	60.3	E			SBL	37	75	NO	56.5	E				
	SBT/R	94	154	NO	47.0	D			SBT/R	136	204	NO	56.5	E			SBT/R	194	265	NO	55.7	E				

Only minor increases in the delay and queue length are present between the two scenarios at this intersection. The results for the Diverted volumes scenario are presented for this intersection in Table 9.

Table 9: Lomas Blvd and Washington St Existing Diverted and Road Diet Diverted Result Summary

Washington St & Lomas Blvd																							
Existing - With Diverted Lead & Coal Ave Traffic																							
Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	10	30	NO	5.2	A	B	MD	EBL	11	32	NO	5.4	A	B	PM	EBL	17	52	NO	10.4	B	B
	EBT/R	33	57	NO	3.6	A			EBT/R	55	90	NO	4.3	A			EBT/R	105	165	NO	6.7	A	
	WBL	5	9	NO	2.5	A			WBL	5	12	NO	3.3	A			WBL	9	14	NO	6.5	A	
	WBT/R	49	54	NO	2.5	A			WBT/R	42	52	NO	2.8	A			WBT/R	61	60	NO	3.8	A	
	NBL	57	106	NO	76.2	E			NBL	32	68	NO	59.4	E			NBL	47	#103	YES	82.9	F	
	NBT/R	117	183	NO	55.6	E			NBT/R	119	183	NO	50.5	D			NBT/R	171	242	NO	50.1	D	
	SBL	34	72	NO	63.4	E			SBL	40	81	NO	60.3	E			SBL	37	75	NO	56.5	E	
	SBT/R	94	154	NO	47.0	D			SBT/R	136	204	NO	56.5	E			SBT/R	194	265	NO	55.7	E	
Road Diet - With Diverted Lead & Coal Ave Traffic																							
Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	Time	Movement	50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	10	30	NO	5.2	A	B	MD	EBL	11	32	NO	5.4	A	B	PM	EBL	17	52	NO	10.4	B	B
	EBT	48	84	NO	4.0	A			EBT	81	136	NO	5.0	A			EBT	160	260	NO	8.1	A	
	EBR	0	10	NO	1.3	A			EBR	0	12	NO	1.4	A			EBR	0	17	NO	1.7	A	
	WBL	5	9	NO	2.4	A			WBL	5	12	NO	3.2	A			WBL	9	14	NO	6.0	A	
	WBT/R	49	54	NO	2.5	A			WBT/R	42	52	NO	2.8	A			WBT/R	61	60	NO	3.7	A	
	NBL	57	106	NO	76.2	E			NBL	32	68	NO	59.4	E			NBL	47	#103	YES	82.9	F	
	NBT/R	117	183	NO	55.6	E			NBT/R	119	183	NO	50.5	D			NBT/R	171	242	NO	50.1	D	
	SBL	34	72	NO	63.4	E			SBL	40	81	NO	60.3	E			SBL	37	75	NO	56.5	E	
	SBT/R	94	154	NO	47.0	D			SBT/R	136	204	NO	56.5	E			SBT/R	194	265	NO	55.7	E	

A comparison between the Diverted and the Non-Diverted scenarios shows that in all cases except for the PM peak hour, northbound left movement shifts from LOS E to LOS F with a delay increase of 15.1 seconds. The signal timings between the Diverted and the Non-Diverted scenarios were not optimized to make the comparison meaningful. As such, it is likely possible to mitigate the additional northbound left-turn delay with only minor impact on the major Lomas Blvd approach if drivers divert from Lead and Coal Avenues in sufficient numbers to produce the results seen in the Diverted scenarios.

It is noted that poor performance of the north and south approaches is not a capacity or insufficient green time issue. The high delays are an effect of the 2-phase signal timing that results in over 70 seconds of opposing east/west green time. With few cars to divide that delay between the capacity results at first glance give the inaccurate impression that there are

excessive queues and delays. However, the waiting north/south traffic is cleared by the available green time.

Monroe - Capacity and Queuing Results

Next, the delay and queue length results for the Lomas Blvd and Monroe St are presented in Table 10. The eastbound approach continues the lane reduction, consisting of two through lanes and dedicated left and right-turn lanes. The westbound approach remains unchanged between the Existing and Road Diet configurations with a through lane, a through-right lane, and a dedicated left-turn lane.

Table 10: Lomas Blvd and Monroe St Existing and Road Diet Result Summary

Monroe St & Lomas Blvd																							
Existing																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	0	2	NO	1.4	A	A	MD	EBL	1	3	NO	1.5	A	A	PM	EBL	1	2	NO	2.3	A	A
	EBT/R	17	22	NO	1.2	A			EBT/R	15	19	NO	1.5	A			EBT/R	36	56	NO	2.1	A	
	WBL	4	9	NO	1.2	A			WBL	14	30	NO	3.5	A			WBL	2	4	NO	2.2	A	
	WBT/R	21	36	NO	0.9	A			WBT/R	47	65	NO	2.3	A			WBT/R	41	72	NO	2.0	A	
	NBT/L	22	53	NO	54.1	D			NBT/L	28	63	NO	56.3	E			NBT/L	21	48	NO	47.3	D	
	NBR	0	19	NO	18.3	B			NBR	0	57	NO	16.5	B			NBR	54	117	NO	38.7	D	
	SBT/L/R	14	54	NO	32.2	C			SBT/L/R	21	61	NO	38.5	D			SBT/L/R	42	86	NO	46.7	D	
Road Diet																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS
AM	EBL	0	2	NO	1.4	A	A	MD	EBL	1	3	NO	1.5	A	A	PM	EBL	1	2	NO	2.3	A	A
	EBT	24	31	NO	1.3	A			EBT	33	41	NO	1.8	A			EBT	51	84	NO	2.6	A	
	EBR	0	2	NO	0.3	A			EBR	0	3	NO	0.3	A			EBR	0	2	NO	0.4	A	
	WBL	4	9	NO	1.2	A			WBL	14	28	NO	3.1	A			WBL	2	4	NO	2.2	A	
	WBT/R	21	36	NO	0.9	A			WBT/R	47	65	NO	2.3	A			WBT/R	41	72	NO	2.0	A	
	NBT/L	22	53	NO	54.1	D			NBT/L	28	63	NO	56.3	E			NBT/L	21	48	NO	47.3	D	
	NBR	0	19	NO	18.3	B			NBR	0	57	NO	16.5	B			NBR	54	117	NO	38.7	D	
	SBT/L/R	14	54	NO	32.2	C			SBT/L/R	21	61	NO	38.5	D			SBT/L/R	42	86	NO	46.7	D	

Again, the performance differences between the Existing and the Road Diet scenarios are minor, and LOS results remain consistent despite the lane reduction. Table 11 contains the results of the Diverted Existing and Road Diet scenarios.

Table 11: Lomas Blvd and Monroe St Existing Diverted and Road Diet Diverted Result Summary

Monroe St & Lomas Blvd																							
Existing - With Diverted Lead & Coal Ave Traffic																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	0	2	NO	1.4	A	A	MD	EBL	1	3	NO	1.5	A	A	PM	EBL	1	2	NO	2.4	A	A
	EBT/R	19	23	NO	1.2	A			EBT/R	16	20	NO	1.6	A			EBT/R	38	60	NO	2.3	A	
	WBL	4	9	NO	1.3	A			WBL	15	25	NO	3.5	A			WBL	2	4	NO	2.4	A	
	WBT/R	22	40	NO	1.0	A			WBT/R	54	58	NO	2.2	A			WBT/R	47	78	NO	2.2	A	
	NBT/L	22	53	NO	54.1	D			NBT/L	28	63	NO	56.3	E			NBT/L	21	48	NO	46.4	D	
	NBR	0	19	NO	18.3	B			NBR	0	57	NO	16.5	B			NBR	60	124	NO	41.7	D	
	SBT/L/R	14	54	NO	32.2	C			SBT/L/R	21	61	NO	38.5	D			SBT/L/R	41	85	NO	45.3	D	
Road Diet - With Diverted Lead & Coal Ave Traffic																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th (ft)	95th (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	0	2	NO	1.4	A	A	MD	EBL	1	3	NO	1.5	A	A	PM	EBL	1	2	NO	2.4	A	A
	EBT	26	32	NO	1.4	A			EBT	35	44	NO	1.8	A			EBT	60	90	NO	2.7	A	
	EBR	0	2	NO	0.3	A			EBR	0	3	NO	0.3	A			EBR	0	2	NO	0.5	A	
	WBL	4	9	NO	1.2	A			WBL	14	24	NO	3.0	A			WBL	2	4	NO	2.4	A	
	WBT/R	23	41	NO	1.0	A			WBT/R	53	59	NO	2.2	A			WBT/R	47	78	NO	2.2	A	
	NBT/L	22	53	NO	54.1	D			NBT/L	28	63	NO	56.3	E			NBT/L	21	48	NO	46.3	D	
	NBR	0	19	NO	18.3	B			NBR	0	57	NO	16.5	B			NBR	61	125	NO	41.9	D	
	SRT/L/R	14	54	NO	32.2	C			SRT/L/R	21	61	NO	38.5	D			SRT/L/R	41	85	NO	45.2	D	

The results of the Diverted scenarios do not differ significantly from the Non-Diverted for this intersection.

San Mateo Blvd - Capacity and Queuing Results

The queuing and delay results for the Lomas Blvd and San Mateo Blvd intersection are presented in Table 12. At this intersection, the Road Diet scenario also continues the lane reduction from three to two through lanes. For that scenario, the eastbound approach is made up of dedicated left, two through lanes, and a through/right lane. The westbound approach has a dedicated left and right-only lanes with two through lanes in the Road Diet scenario.

Table 12: Lomas Blvd and San Mateo Blvd Existing and Road Diet Result Summary

San Mateo Blvd & Lomas Blvd																							
Existing																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	78	#155	YES	38.6	D	C	MD	EBL	131	191	NO	34.2	C	C	PM	EBL	~140	#304	YES	82.4	F	D
	EBT/R	109	153	NO	31.5	C			EBT/R	187	230	NO	36.3	D			EBT/R	298	#387	YES	39.1	D	
	WBL	91	45	NO	15.0	B			WBL	91	55	NO	23.0	C			WBL	33	117	NO	41.5	D	
	WBT	302	379	NO	33.1	C			WBT	206	270	NO	36.5	D			WBT	267	335	NO	29.1	C	
	WBR	43	113	NO	7.5	A			WBR	22	88	NO	8.8	A			WBR	51	4	NO	3.7	A	
	NBL	37	68	NO	23.1	C			NBL	47	82	NO	23.6	C			NBL	49	#114	YES	35.7	D	
	NBT/R	206	265	NO	30.0	C			NBT/R	223	290	NO	32.9	C			NBT/R	379	#532	YES	44.3	D	
	SBL	57	96	NO	23.8	C			SBL	76	129	NO	31.4	C			SBL	71	145	NO	39.9	D	
SBT/R	232	282	NO	28.5	C	SBT/R	212	274	NO	30.0	C	SBT/R	269	322	NO	30.4	C						
Road Diet																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS
AM	EBL	78	155	YES	38.2	D	C	MD	EBL	132	192	NO	34.0	C	C	PM	EBL	140	#278	YES	50.8	D	D
	EBT/R	109	153	NO	31.2	C			EBT/R	188	230	NO	36.1	D			EBT/R	298	#395	YES	38.5	D	
	WBL	71	39	NO	13.7	B			WBL	92	53	NO	22.5	C			WBL	39	119	NO	42.8	D	
	WBT	303	379	NO	31.2	C			WBT	207	270	NO	35.5	D			WBT	282	#367	YES	35.7	C	
	WBR	46	56	NO	5.9	A			WBR	29	84	NO	8.2	A			WBR	60	21	NO	4.7	A	
	NBL	37	68	NO	23.1	C			NBL	47	82	NO	23.6	C			NBL	49	#114	YES	35.7	D	
	NBT/R	206	265	NO	30.0	C			NBT/R	223	290	NO	32.9	C			NBT/R	379	#532	YES	44.3	D	
	SBL	57	96	NO	23.8	C			SBL	76	129	NO	31.4	C			SBL	71	145	NO	39.9	D	
SBT/R	232	282	NO	28.5	C	SBT/R	212	274	NO	30.0	C	SBT/R	269	322	NO	30.4	C						

One significant difference exists between the Existing results and the Road Diet results shown in Table 12. The eastbound left-turn movement shifted from LOS F to D in the PM peak hour. As directed by COA TED, the signal timing was adjusted between scenarios to determine if signal timing optimization could mitigate the existing operational deficiency, which it was. Table 13 contains the results of the Diverted Existing and Road Diet scenarios.

Table 13: Lomas Blvd and San Mateo Blvd Existing Diverted and Road Diet Diverted Result Summary

San Mateo Blvd & Lomas Blvd																									
Existing - With Diverted Lead & Coal Ave Traffic																									
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS		
AM	EBL	78	#160	YES	39.4	D	C	MD	EBL	132	191	NO	34.6	C	C	PM	EBL	151	313	YES	94.2	F	D		
	EBT/R	115	160	NO	31.0	C			EBT/R	196	241	NO	36.3	D			EBT/R	316	420	YES	40.6	D			
	WBL	91	39	NO	15.3	B			WBL	91	55	NO	23.8	C			WBL	34	116	NO	41.6	D			
	WBT	308	385	NO	33.6	C			WBT	211	274	NO	36.8	D			WBT	280	351	NO	30.1	C			
	WBR	44	114	NO	7.4	A			WBR	23	88	NO	8.8	A			WBR	41	5	NO	3.6	A			
	NBL	48	84	NO	27.4	C			NBL	60	101	NO	26.2	C			NBL	66	198	YES	57.9	E			
	NBT/R	206	265	NO	30.0	C			NBT/R	223	290	NO	33.0	C			NBT/R	379	532	YES	44.3	D			
	SBL	57	96	NO	23.8	C			SBL	76	132	NO	31.7	C			SBL	71	145	NO	40.1	D			
SBT/R	232	282	NO	26.7	C	SBT/R	216	284	NO	31.5	C	SBT/R	269	322	NO	30.8	C								
Road Diet - With Diverted Lead & Coal Ave Traffic																									
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS		
AM	EBL	78	#159	YES	38.9	D	C	MD	EBL	132	192	NO	34.4	C	C	PM	EBL	141	#280	YES	53.0	D	D		
	EBT/R	115	160	NO	30.7	C			EBT/R	197	242	NO	36.1	D			EBT/R	316	#428	YES	39.7	D			
	WBL	69	36	NO	13.9	B			WBL	92	54	NO	23.3	C			WBL	43	119	NO	43.1	D			
	WBT	308	385	NO	31.6	C			WBT	211	275	NO	35.8	D			WBT	295	#304	YES	37.7	D			
	WBR	47	53	NO	5.7	A			WBR	29	82	NO	8.1	A			WBR	51	19	NO	4.6	A			
	NBL	48	84	NO	27.4	C			NBL	60	101	NO	26.2	C			NBL	66	#198	YES	57.9	E			
	NBT/R	206	265	NO	30.0	C			NBT/R	223	290	NO	33.0	C			NBT/R	379	532	YES	44.3	D			
	SBL	57	96	NO	23.8	C			SBL	76	132	NO	31.7	C			SBL	71	145	NO	40.1	D			
SBT/R	232	282	NO	26.7	C	SBT/R	216	284	NO	31.5	C	SBT/R	269	322	NO	30.8	C								

The results of the Diverted scenarios do not differ significantly from the Non-Diverted scenario for this intersection except for the eastbound left movement as discussed above.

San Pedro Dr - Capacity and Queuing Results

The queuing and delay results for the Lomas Blvd and San Pedro Dr intersection are presented in Table 14. This intersection would be the eastern termini of the Road Diet treatment, and the westbound approach would begin the lane reduction from San Pedro Dr to Girard. The outer westbound through/right lane would be converted to a terminating right-turn-only lane. The eastbound BAT lane would terminate at this intersection.

Table 14: Lomas Blvd and San Pedro Dr Existing and Road Diet Result Summary

San Pedro Dr & Lomas Blvd																							
Existing																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS
AM	EBL	9	m22	NO	7.8	A	B	MD	EBL	0	m44	NO	8.8	A	C	PM	EBL	20	m41	NO	12.6	B	C
	EBT/R	28	42	NO	6.0	A			EBT/R	53	66	NO	8.9	A			EBT/R	227	m343	NO	13.6	B	
	WBL	30	64	NO	7.3	A			WBL	26	59	NO	10.8	B			WBL	36	75	NO	16.7	B	
	WBT/R	148	221	NO	11.8	B			WBT/R	101	165	NO	16.2	B			WBT/R	156	224	NO	20.6	C	
	NBL	40	71	NO	36.3	D			NBL	66	101	NO	35.6	D			NBL	83	122	NO	37.8	D	
	NBT	71	104	NO	48.1	D			NBT	92	125	NO	44.6	D			NBT	175	212	NO	45.8	D	
	NBR	0	49	NO	11.9	B			NBR	0	52	NO	9.5	A			NBR	28	99	NO	12.0	B	
	SBL	41	73	NO	34.6	C			SBL	74	110	NO	32.3	C			SBL	91	132	NO	38.5	D	
SBT/R	101	143	NO	49.1	D	SBT/R	130	175	NO	43.1	D	SBT/R	186	232	NO	48.3	D						
Road Diet																							
Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service			Time	Movement	Queuing Results			Delay and Level of Service		
		50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS			50th % (ft)	95th % (ft)	Spillback Rate	Delay (s/veh)	LOS	Overall LOS
AM	EBL	9	m22	NO	8.1	A	B	MD	EBL	0	m44	NO	8.4	A	C	PM	EBL	20	m45	NO	13.3	B	C
	EBT	40	59	NO	6.9	A			EBT	72	171	NO	10.3	B			EBT	401	m#517	YES	18.7	B	
	EBR	11	m55	NO	14.3	B			EBR	37	m#105	YES	36.4	D			EBR	15	m29	NO	21.2	C	
	WBL	30	64	NO	7.3	A			WBL	26	59	NO	10.6	B			WBL	36	75	NO	18.0	B	
	WBT	232	358	NO	14.1	B			WBT	140	234	NO	18.0	B			WBT	222	327	NO	23.5	C	
	WBR	0	0	NO	6.7	A			WBR	0	#24	YES	20.4	C			WBR	0	440	YES	25.9	C	
	NBL	40	71	NO	36.3	D			NBL	66	101	NO	35.6	D			NBL	83	122	NO	37.8	D	
	NBT	71	104	NO	48.1	D			NBT	92	125	NO	44.6	D			NBT	175	212	NO	45.8	D	
NBR	0	49	NO	11.9	B	NBR	0	52	NO	9.5	A	NBR	28	99	NO	12.0	B						
SBL	41	73	NO	34.6	C	SBL	74	110	NO	32.3	C	SBL	91	132	NO	38.5	D						
SBT/R	101	143	NO	49.1	D	SBT/R	130	175	NO	43.1	D	SBT/R	186	232	NO	48.3	D						

Performance differences between the Existing and the Road Diet scenarios are minor, and LOS results remain consistent despite the lane reduction. Table 15 contains the results of the Diverted Existing and Road Diet scenarios.

Table 15: Lomas Blvd and San Pedro Dr Existing Diverted and Road Diet Diverted Result Summary

San Pedro Dr & Lomas Blvd																										
Existing - With Diverted Lead & Coal Ave Traffic																										
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service			
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	
AM	EBL	9	m22	NO	7.7	A	B	MD	EBL	27	44	NO	8.8	A	C	PM	EBL	21	m40	NO	13.1	B	C			
	EBT/R	29	43	NO	6.1	A			EBT/R	54	67	NO	9.0	A			EBT/R	245	m354	NO	13.7	B				
	WBL	30	65	NO	7.5	A			WBL	26	59	NO	10.9	B			WBL	37	75	NO	17.2	B				
	WBT/R	150	225	NO	12.0	B			WBT/R	104	166	NO	16.4	B			WBT/R	162	227	NO	20.9	C				
	NBL	43	76	NO	36.5	D			NBL	69	105	NO	36.0	D			NBL	91	132	NO	40.0	D				
	NBT	71	104	NO	47.5	D			NBT	92	125	NO	44.2	D			NBT	173	212	NO	45.3	D				
	NBR	0	48	NO	11.7	B			NBR	0	52	NO	9.4	A			NBR	27	96	NO	11.8	B				
	SBL	41	73	NO	34.3	C			SBL	73	110	NO	32.0	C			SBL	90	132	NO	37.9	D				
	SBT/R	101	143	NO	49.1	D			SBT/R	130	175	NO	43.1	D			SBT/R	186	232	NO	48.7	D				
Road Diet - With Diverted Lead & Coal Ave Traffic																										
Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service				Time	Movement	Queuing Results			Delay and Level of Service			
		50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS				50th % (ft)	95th % (ft)	Spillback	Delay (s/veh)	LOS	Overall LOS	
AM	EBL	9	m22	NO	8.0	A	B	MD	EBL	27	m44	NO	8.3	A	C	PM	EBL	21	m43	NO	13.9	B	C			
	EBT	41	60	NO	7.0	A			EBT	73	162	NO	10.3	B			EBT	411	m#532	YES	18.8	B				
	EBR	13	m65	NO	16.7	B			EBR	39	m#116	YES	39.7	D			EBR	27	m45	NO	28.7	C				
	WBL	30	65	NO	7.4	A			WBL	26	59	NO	10.8	B			WBL	37	75	NO	18.7	B				
	WBT	235	365	NO	14.4	B			WBT	143	236	NO	18.2	B			WBT	232	334	NO	23.9	C				
	WBR	0	0	NO	6.7	A			WBR	0	24	YES	20.4	C			WBR	0	40	YES	25.9	C				
	NBL	43	76	NO	36.5	D			NBL	69	105	NO	36.0	D			NBL	91	132	NO	40.0	D				
	NBT	71	104	NO	47.5	D			NBT	92	125	NO	44.2	D			NBT	173	212	NO	45.3	D				
	NBR	0	48	NO	11.7	B			NBR	0	52	NO	9.4	A			NBR	27	96	NO	11.8	B				
	SBL	41	73	NO	34.3	C			SBL	73	110	NO	32.0	C			SBL	90	132	NO	37.9	D				
	SBT/R	101	143	NO	49.1	D			SBT/R	130	175	NO	43.1	D			SBT/R	186	232	NO	48.7	D				

The results of the Diverted scenarios do not differ significantly from the Non-Diverted for this intersection.

Capacity and Queuing Analysis Results Summary

The capacity and queuing results compared across scenarios generally show only minor impacts if a road diet was implemented, and in most cases, the addition of diverted volumes from Lead and Coal Avenues also has little impact on the corridor, even under road diet conditions. There are two notable exceptions. The westbound left turn movement at Carlisle Blvd during the PM peak hour and the eastbound through movement at San Mateo Blvd, also during the PM peak hour.

For the eastbound movement on San Mateo Blvd, there are three options that may serve to mitigate any potential delay and queuing issues. First, signal timing could be used to distribute increased delay and queue lengths more equitably across all the through movements at this intersection. Second, the total signal cycle length could be increased at the expense of coordinated operations at this intersection. Third, the BAT lanes could be terminated at Manzano St on the eastbound approach, allowing three lanes of through traffic to transit the intersection. The BAT lane and lane reduction would then resume for the eastbound lanes at Madeira Dr.

MULTIMODAL ASSESSMENT

The Lomas Blvd corridor between Girard Blvd and San Pedro Dr is not on the MRMPO Long Range Bikeway System Plan (LRBSP) for bike lane implementation. A bike lane treatment on Lomas Blvd would be redundant due to the proximity of a parallel bike path three blocks south on Roma and Marquett Avenues. It is further noted that Roma and Marquette are lower volume corridors, serving as a more suitable bike route. The LRBSP further calls for the future upgrading from bike paths to bike boulevards on Roma and Marquett Avenues extending from Girard Blvd to San Pedro Dr. The Road Diet Concept would improve transit operations, allowing for tighter bus headways with more frequent service and enhanced opportunities for bus stops. Furthermore, the BAT lane concept provides space for buses to stop without blocking vehicle travel lanes, resulting in safer bus operations. It is understood that the City of Albuquerque Transit department is expecting to improve service on Lomas Blvd, which could be aided by the installation of BAT lanes.

TRAFFIC SIGNAL-BASED SAFETY COUNTERMEASURES ASSESSMENT

Two of the recommended safety mitigation measures, Red Extension and Rest-In-Red, have great potential to enhance safety along the study corridor. However, the traffic signal infrastructure along the corridor is significantly outdated. The Morningside Dr intersection is the only intersection to have been recently brought up to current technological standards. All of the other intersections would benefit from an equipment upgrade that includes vehicle detection and that is capable of both Red Extension and Rest-in-Red operation during some or all parts of the day, depending on engineering judgement.

Additionally, due to the age of the existing signal infrastructure, new cabinets, controllers, and an alternative communications system are necessary, as the existing twisted pair/ACS2

configuration cannot support the red extension programming. Further, these upgrades could require new conduit and wiring and an alternative communications system, as the existing twisted pair/ACS2 configuration cannot support the red extension programming.

CONCLUSION

A road diet implementation along the Lomas Blvd corridor between Girard Blvd and San Pedro Dr is feasible and would likely provide corridor safety benefits in addition to improving the City of Albuquerque's transit network. While it is expected that some movements will see an increase in delay, the implementation of the road diet will provide an overall net benefit to the community, championed by safety and transit improvements. The installation of BAT lanes supports the city's initiatives to improve transit service and pedestrian modality along Lomas Blvd. If the city chooses to implement a road diet but BAT lanes are not preferred, a road diet could still be implemented using a combination of Green Stormwater Infrastructure (GSI) features, in conjunction with right-turn lanes, as a secondary option.

Sincerely,



Jonathon Kruse, PE PTOE

Senior Project Manager

Attachments: Appendix

Lomas Road Diet Study Appendix

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Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	154	444	88	183	829	188	120	849	107	140	916	168
Future Volume (vph)	154	444	88	183	829	188	120	849	107	140	916	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.975				0.850		0.983			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4958	0	1770	3539	1583	1770	4999	0	1770	4968	0
Flt Permitted	0.142			0.340			0.154			0.170		
Satd. Flow (perm)	265	4958	0	633	3539	1583	287	4999	0	317	4968	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34				200		21			38	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2039			2609			667			683	
Travel Time (s)		39.7			44.5			11.4			11.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	164	472	94	195	882	200	128	903	114	149	974	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	566	0	195	882	200	128	1017	0	149	1153	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	43.2	32.2		47.8	34.8	34.8	48.0	39.0		52.1	41.2	
Actuated g/C Ratio	0.39	0.29		0.43	0.32	0.32	0.44	0.35		0.47	0.37	
v/c Ratio	0.73	0.38		0.49	0.79	0.31	0.58	0.57		0.55	0.61	
Control Delay (s/veh)	39.4	31.0		15.3	33.6	7.4	27.4	30.0		23.8	28.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	39.4	31.0		15.3	33.6	7.4	27.4	30.0		23.8	28.7	

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C		B	C	A	C	C		C	C	
Approach Delay (s/veh)		32.9			26.7			29.7			28.2	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	78	115		91	308	44	48	206		57	232	
Queue Length 95th (ft)	#160	160		39	385	114	84	265		96	282	
Internal Link Dist (ft)		1959			2529			587			603	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	238	1475		497	1120	637	227	1785		355	1884	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.69	0.38		0.39	0.79	0.31	0.56	0.57		0.42	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 28.9

Intersection LOS: C

Intersection Capacity Utilization 75.4%

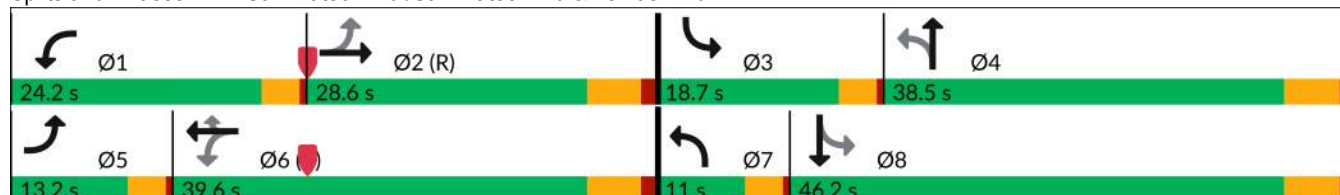
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	566	195	882	200	128	1017	149	1153
v/c Ratio	0.73	0.38	0.49	0.79	0.31	0.58	0.57	0.55	0.61
Control Delay (s/veh)	39.4	31.0	15.3	33.6	7.4	27.4	30.0	23.8	28.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.4	31.0	15.3	33.6	7.4	27.4	30.0	23.8	28.7
Queue Length 50th (ft)	78	115	91	308	44	48	206	57	232
Queue Length 95th (ft)	#160	160	39	385	114	84	265	96	282
Internal Link Dist (ft)		1959		2529			587		603
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	238	1475	497	1120	637	227	1785	355	1884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.38	0.39	0.79	0.31	0.56	0.57	0.42	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (vph)	80	560	51	137	1080	45	71	192	102	68	226	71
Future Volume (vph)	80	560	51	137	1080	45	71	192	102	68	226	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.988			0.994				0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5024	0	1770	5055	0	1770	3539	1583	1770	3412	0
Flt Permitted	0.201			0.371			0.355			0.582		
Satd. Flow (perm)	374	5024	0	691	5055	0	661	3539	1583	1084	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			7				109			37
Link Speed (mph)		40			40				35			35
Link Distance (ft)		2609			2568				471			663
Travel Time (s)		44.5			43.8				9.2			12.9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	596	54	146	1149	48	76	204	109	72	240	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	650	0	146	1197	0	76	204	109	72	316	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	73.5	66.2		76.8	69.1		22.1	13.7	13.7	21.7	13.5	
Actuated g/C Ratio	0.67	0.60		0.70	0.63		0.20	0.12	0.12	0.20	0.12	
v/c Ratio	0.26	0.21		0.26	0.38		0.36	0.46	0.37	0.28	0.70	
Control Delay (s/veh)	7.7	6.1		7.5	12.0		36.5	47.5	11.7	34.3	49.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.7	6.1		7.5	12.0		36.5	47.5	11.7	34.3	49.1	

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report

Page 4

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	B		D	D	B	C	D	
Approach Delay (s/veh)		6.3			11.5			35.3			46.3	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	9	29		30	150		43	71	0	41	101	
Queue Length 95th (ft)	m22	43		65	225		76	104	48	73	143	
Internal Link Dist (ft)		2529			2488			391			583	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	385	3029		619	3177		280	971	513	298	896	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.22	0.21		0.24	0.38		0.27	0.21	0.21	0.24	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 18.2

Intersection LOS: B

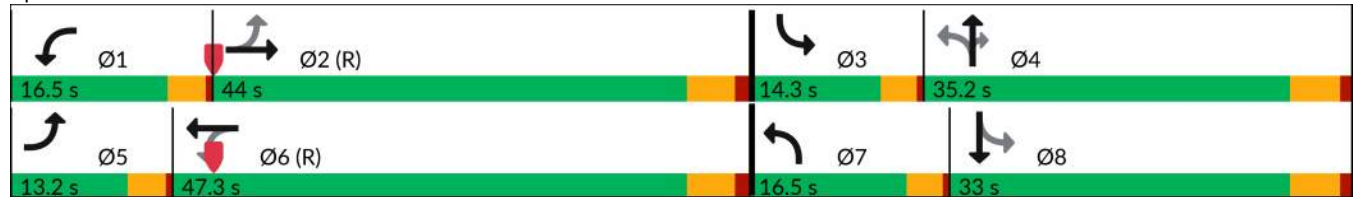
Intersection Capacity Utilization 53.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	85	650	146	1197	76	204	109	72	316
v/c Ratio	0.26	0.21	0.26	0.38	0.36	0.46	0.37	0.28	0.70
Control Delay (s/veh)	7.7	6.1	7.5	12.0	36.5	47.5	11.7	34.3	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.7	6.1	7.5	12.0	36.5	47.5	11.7	34.3	49.1
Queue Length 50th (ft)	9	29	30	150	43	71	0	41	101
Queue Length 95th (ft)	m22	43	65	225	76	104	48	73	143
Internal Link Dist (ft)		2529		2488		391			583
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	385	3029	619	3177	280	971	513	298	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.24	0.38	0.27	0.21	0.21	0.24	0.35

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	550	44	44	866	53	78	124	56	48	99
Future Volume (vph)	1	61	550	44	44	866	53	78	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.989			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5120	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.276			0.401			0.450			0.368	
Satd. Flow (perm)	0	524	5120	0	760	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			21			10			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			664			1574			367
Travel Time (s)			27.0			12.9			35.8			8.3
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	585	47	47	921	56	83	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	632	0	47	977	0	83	192	0	51	166
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

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Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

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Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.16	0.16		0.08	0.35		0.72	0.73		0.54	0.62
Control Delay (s/veh)		5.2	3.6		2.5	2.5		76.2	55.6		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.2	3.6		2.5	2.5		76.2	55.6		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			2.5			61.8			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	33		5	49		57	117		34	94
Queue Length 95th (ft)		30	57		9	54		106	183		72	154
Internal Link Dist (ft)			1308			584			1494			287
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		404	3962		587	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.16		0.08	0.35		0.32	0.34		0.24	0.30

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 15.0

Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Washington St & Lomas Blvd





Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

6: Washington St & Lomas Blvd

09/03/2025

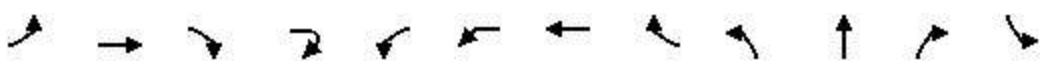


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	632	47	977	83	192	51	166
v/c Ratio	0.16	0.16	0.08	0.35	0.72	0.73	0.54	0.62
Control Delay (s/veh)	5.2	3.6	2.5	2.5	76.2	55.6	63.4	47.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.2	3.6	2.5	2.5	76.2	55.6	63.4	47.0
Queue Length 50th (ft)	10	33	5	49	57	117	34	94
Queue Length 95th (ft)	30	57	9	54	106	183	72	154
Internal Link Dist (ft)		1308		584		1494		287
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	404	3962	587	2763	260	566	212	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.16	0.08	0.35	0.32	0.34	0.24	0.30
Intersection Summary								

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	455	18	4	20	74	855	89	54	177	11	79
Future Volume (vph)	78	455	18	4	20	74	855	89	54	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00	1.00		1.00	1.00		1.00
Frt		0.993					0.986			0.991		
Flt Protected	0.950					0.950			0.950			0.950
Satd. Flow (prot)	1805	5151	0	0	0	1805	5101	0	1805	1881	0	1805
Flt Permitted	0.190					0.410			0.950			0.950
Satd. Flow (perm)	361	5151	0	0	0	776	5101	0	1800	1881	0	1802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			30		
Link Distance (ft)		2652					1302			705		
Travel Time (s)		51.7					25.4			16.0		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	484	19	4	21	79	910	95	57	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	507	0	0	0	100	1005	0	57	200	0	84
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Split	NA		Split
Protected Phases	5	2			1	1	6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5		24.0
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0		22.0
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%		20.0%
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5		16.5
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0				3.5	5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lead	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	None	Max		None	None		None
Walk Time (s)		7.0					7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0					21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0					0		0	0		0
Act Effct Green (s)	46.7	37.1				48.6	39.8		14.7	14.7		14.0
Actuated g/C Ratio	0.42	0.34				0.44	0.36		0.13	0.13		0.13

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

					
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			135		
Link Speed (mph)	30			35	
Link Distance (ft)	634			376	
Travel Time (s)	14.4			7.3	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Turn Type	NA	pt+ov	custom	Prot	Prot
Protected Phases	4	3 4	3 4	3	3
Permitted Phases					
Detector Phase	4	3 4	3 4	3	3
Switch Phase					
Minimum Initial (s)	8.0			8.0	8.0
Minimum Split (s)	24.0			22.0	22.0
Total Split (s)	22.0			22.0	22.0
Total Split (%)	20.0%			20.0%	20.0%
Maximum Green (s)	16.5			17.5	17.5
Yellow Time (s)	3.5			3.5	3.5
All-Red Time (s)	2.0			1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0
Total Lost Time (s)	5.5			4.5	4.5
Lead/Lag	Lag			Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes
Vehicle Extension (s)	2.0			2.0	2.0
Recall Mode	None			None	None
Walk Time (s)	0.0				
Flash Don't Walk (s)	0.0				
Pedestrian Calls (#/hr)	0				
Act Effect Green (s)	14.0	31.0	31.0	11.5	11.5
Actuated g/C Ratio	0.13	0.28	0.28	0.10	0.10

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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
v/c Ratio	0.34	0.29				0.24	0.54		0.24	0.79		0.37
Control Delay (s/veh)	15.1	21.0				21.4	31.8		44.0	67.8		47.4
Queue Delay	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	15.1	21.0				21.4	31.8		44.0	67.8		47.4
LOS	B	C				C	C		D	E		D
Approach Delay (s/veh)		20.2					30.8			62.5		
Approach LOS		C					C			E		
Queue Length 50th (ft)	15	104				40	209		36	136		55
Queue Length 95th (ft)	28	156				86	#307		75	#232		100
Internal Link Dist (ft)		2572					1222			625		
Turn Bay Length (ft)	95					100			112			130
Base Capacity (vph)	336	1737				479	1854		275	289		275
Starvation Cap Reductn	0	0				0	0		0	0		0
Spillback Cap Reductn	0	0				0	0		0	0		0
Storage Cap Reductn	0	0				0	0		0	0		0
Reduced v/c Ratio	0.25	0.29				0.21	0.54		0.21	0.69		0.31

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 34.8

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4	 Ø8
16.5 s	27.5 s	22 s	22 s	22 s
 Ø5	 Ø6			
16.5 s	27.5 s			



Lane Group	SBT	SBR	SBR2	NEL	NER
v/c Ratio	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
LOS	E	C	A	E	D
Approach Delay (s/veh)	38.2			54.7	
Approach LOS	D			D	
Queue Length 50th (ft)	122	52	0	80	35
Queue Length 95th (ft)	190	86	40	134	61
Internal Link Dist (ft)	554			296	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.20	0.23	0.40	0.21
Intersection Summary					

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	83	507	100	1005	57	200	84	177	97	135	116	93
v/c Ratio	0.34	0.29	0.24	0.54	0.24	0.79	0.37	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	15.1	21.0	21.4	31.8	44.0	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.1	21.0	21.4	31.8	44.0	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Length 50th (ft)	15	104	40	209	36	136	55	122	52	0	80	35
Queue Length 95th (ft)	28	156	86	#307	75	#232	100	190	86	40	134	61
Internal Link Dist (ft)		2572		1222		625		554			296	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	336	1737	479	1854	275	289	275	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.21	0.54	0.21	0.69	0.31	0.61	0.20	0.23	0.40	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (vph)	49	451	65	124	843	103	89	145	49	35	172	76
Future Volume (vph)	49	451	65	124	843	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.981			0.984			0.962			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5066	0	1805	5085	0	1805	1820	0	1805	1799	0
Flt Permitted	0.246			0.400			0.271			0.611		
Satd. Flow (perm)	467	5066	0	756	5085	0	514	1820	0	1156	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			22			15			19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1491			2652			1000			578	
Travel Time (s)		29.0			51.7			22.7			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	480	69	132	897	110	95	154	52	37	183	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	549	0	132	1007	0	95	206	0	37	264	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	63.7	56.9		68.6	60.6		33.5	25.7		27.0	19.5	
Actuated g/C Ratio	0.58	0.52		0.62	0.55		0.30	0.23		0.25	0.18	

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.16	0.21		0.24	0.36		0.37	0.47		0.12	0.79	
Control Delay (s/veh)	11.2	15.4		3.3	3.3		29.9	36.9		24.9	56.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.2	15.4		3.3	3.3		29.9	36.9		24.9	56.6	
LOS	B	B		A	A		C	D		C	E	
Approach Delay (s/veh)		15.1			3.3			34.7			52.7	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	13	69		10	31		49	121		18	168	
Queue Length 95th (ft)	36	118		18	37		77	177		37	241	
Internal Link Dist (ft)		1411			2572			920			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	451	2635		600	2813		309	478		423	464	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.21		0.22	0.36		0.31	0.43		0.09	0.57	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 16.7

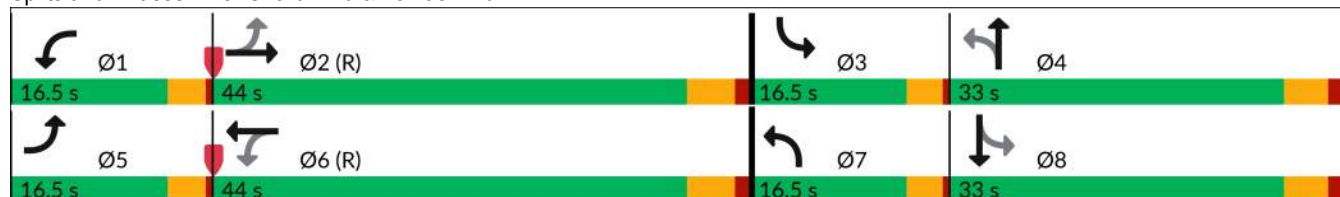
Intersection LOS: B

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	52	549	132	1007	95	206	37	264
v/c Ratio	0.16	0.21	0.24	0.36	0.37	0.47	0.12	0.79
Control Delay (s/veh)	11.2	15.4	3.3	3.3	29.9	36.9	24.9	56.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.2	15.4	3.3	3.3	29.9	36.9	24.9	56.6
Queue Length 50th (ft)	13	69	10	31	49	121	18	168
Queue Length 95th (ft)	36	118	18	37	77	177	37	241
Internal Link Dist (ft)		1411		2572		920		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	451	2635	600	2813	309	478	423	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.21	0.22	0.36	0.31	0.43	0.09	0.57
Intersection Summary								

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 						 	
Traffic Volume (vph)	5	610	60	100	960	5	25	5	15	15	5	30
Future Volume (vph)	5	610	60	100	960	5	25	5	15	15	5	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			100			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.960			0.985	
Satd. Flow (prot)	1770	5019	0	1770	3536	0	0	1788	1583	0	1684	0
Flt Permitted	0.273			0.369				0.825			0.887	
Satd. Flow (perm)	509	5019	0	687	3536	0	0	1537	1583	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			1				20			32
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		664			2039			675			692	
Travel Time (s)		12.9			39.7			15.3			15.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	5	649	64	106	1021	5	27	5	16	16	5	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	713	0	106	1026	0	0	32	16	0	53	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effect Green (s)	95.3	95.3		95.3	95.3			8.3	8.3		8.3	
Actuated g/C Ratio	0.87	0.87		0.87	0.87			0.08	0.08		0.08	
v/c Ratio	0.01	0.16		0.18	0.34			0.28	0.12		0.37	
Control Delay (s/veh)	1.4	1.2		1.3	1.0			54.1	18.3		32.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.4	1.2		1.3	1.0			54.1	18.3		32.2	

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	A			D	B		C	
Approach Delay (s/veh)		1.2			1.0			42.2			32.2	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)	0	19		4	22			22	0		14	
Queue Length 95th (ft)	m2	23		m9	40			53	19		54	
Internal Link Dist (ft)		584			1959			595			612	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	440	4350		594	3062			468	496		484	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.01	0.16		0.18	0.34			0.07	0.03		0.11	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay (s/veh): 2.9

Intersection LOS: A

Intersection Capacity Utilization 62.1%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

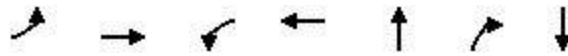
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	5	713	106	1026	32	16	53
v/c Ratio	0.01	0.16	0.18	0.34	0.28	0.12	0.37
Control Delay (s/veh)	1.4	1.2	1.3	1.0	54.1	18.3	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.4	1.2	1.3	1.0	54.1	18.3	32.2
Queue Length 50th (ft)	0	19	4	22	22	0	14
Queue Length 95th (ft)	m2	23	m9	40	53	19	54
Internal Link Dist (ft)		584		1959	595		612
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	440	4350	594	3062	468	496	484
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.16	0.18	0.34	0.07	0.03	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (vph)	605	10	20	965	50	25
Future Volume (vph)	605	10	20	965	50	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5070	0	1770	5085	1770	1583
Flt Permitted			0.392		0.950	
Satd. Flow (perm)	5070	0	730	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	5					27
Link Speed (mph)	35			35	25	
Link Distance (ft)	1302			1388	612	
Travel Time (s)	25.4			27.0	16.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	644	11	21	1027	53	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	655	0	21	1027	53	27
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	44.7		44.7	44.7	8.1	8.1
Actuated g/C Ratio	0.81		0.81	0.81	0.15	0.15
v/c Ratio	0.16		0.04	0.25	0.21	0.11
Control Delay (s/veh)	2.5		3.4	2.8	22.9	10.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.5		3.4	2.8	22.9	10.0

Lomas Road Diet - Existing AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	C	B
Approach Delay (s/veh)	2.5			2.8	18.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	22		2	39	19	0
Queue Length 95th (ft)	33		7	54	38	16
Internal Link Dist (ft)	1222			1308	532	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4104		591	4115	776	709
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.16		0.04	0.25	0.07	0.04

Intersection Summary

Area Type: Other

Cycle Length: 66

Actuated Cycle Length: 55.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay (s/veh): 3.4

Intersection LOS: A

Intersection Capacity Utilization 33.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	655	21	1027	53	27
v/c Ratio	0.16	0.04	0.25	0.21	0.11
Control Delay (s/veh)	2.5	3.4	2.8	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.5	3.4	2.8	22.9	10.0
Queue Length 50th (ft)	22	2	39	19	0
Queue Length 95th (ft)	33	7	54	38	16
Internal Link Dist (ft)	1222		1308	532	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4104	591	4115	776	709
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.04	0.25	0.07	0.04
Intersection Summary					

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	154	434	63	183	819	188	95	849	107	140	916	168
Future Volume (vph)	154	434	63	183	819	188	95	849	107	140	916	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.981				0.850		0.983			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4989	0	1770	3539	1583	1770	4999	0	1770	4968	0
Flt Permitted	0.148			0.362			0.156			0.169		
Satd. Flow (perm)	276	4989	0	674	3539	1583	291	4999	0	315	4968	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				200		21			38	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2039			2609			667			683	
Travel Time (s)		39.7			44.5			11.4			11.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	164	462	67	195	871	200	101	903	114	149	974	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	529	0	195	871	200	101	1017	0	149	1153	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	43.2	32.2		47.8	34.8	34.8	47.7	39.0		52.4	41.5	
Actuated g/C Ratio	0.39	0.29		0.43	0.32	0.32	0.43	0.35		0.48	0.38	
v/c Ratio	0.71	0.36		0.48	0.78	0.31	0.47	0.57		0.55	0.61	
Control Delay (s/veh)	38.6	31.5		15.0	33.1	7.5	23.1	30.0		23.8	28.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	38.6	31.5		15.0	33.1	7.5	23.1	30.0		23.8	28.5	

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C		B	C	A	C	C		C	C	
Approach Delay (s/veh)		33.2			26.3			29.4			27.9	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	78	109		91	302	43	37	206		57	232	
Queue Length 95th (ft)	#155	153		45	379	113	68	265		96	282	
Internal Link Dist (ft)		1959			2529			587			603	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	241	1476		508	1121	637	228	1785		354	1898	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.68	0.36		0.38	0.78	0.31	0.44	0.57		0.42	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 28.7

Intersection LOS: C

Intersection Capacity Utilization 73.7%

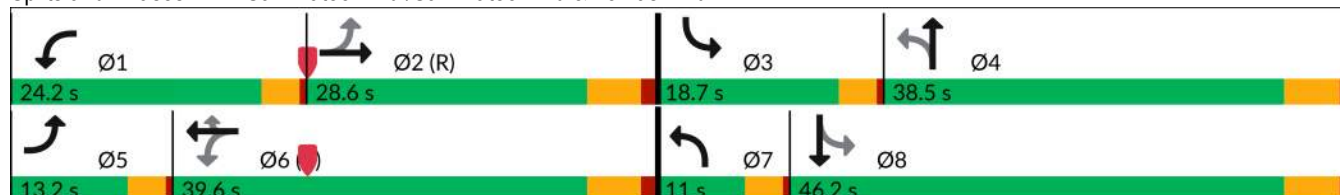
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	529	195	871	200	101	1017	149	1153
v/c Ratio	0.71	0.36	0.48	0.78	0.31	0.47	0.57	0.55	0.61
Control Delay (s/veh)	38.6	31.5	15.0	33.1	7.5	23.1	30.0	23.8	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	31.5	15.0	33.1	7.5	23.1	30.0	23.8	28.5
Queue Length 50th (ft)	78	109	91	302	43	37	206	57	232
Queue Length 95th (ft)	#155	153	45	379	113	68	265	96	282
Internal Link Dist (ft)		1959		2529			587		603
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	241	1476	508	1121	637	228	1785	354	1898
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.36	0.38	0.78	0.31	0.44	0.57	0.42	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	555	46	137	1075	45	66	192	102	68	226	71
Future Volume (vph)	80	555	46	137	1075	45	66	192	102	68	226	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.988			0.994				0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5024	0	1770	5055	0	1770	3539	1583	1770	3412	0
Flt Permitted	0.203			0.376			0.363			0.567		
Satd. Flow (perm)	378	5024	0	700	5055	0	676	3539	1583	1056	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			7				109			37
Link Speed (mph)		40			40				35			35
Link Distance (ft)		2609			2568				471			663
Travel Time (s)		44.5			43.8				9.2			12.9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	590	49	146	1144	48	70	204	109	72	240	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	639	0	146	1192	0	70	204	109	72	316	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	73.8	66.5		77.1	69.4		21.5	13.4	13.4	21.7	13.5	
Actuated g/C Ratio	0.67	0.60		0.70	0.63		0.20	0.12	0.12	0.20	0.12	
v/c Ratio	0.26	0.21		0.26	0.37		0.34	0.47	0.38	0.28	0.70	
Control Delay (s/veh)	7.8	6.0		7.3	11.8		36.3	48.1	11.9	34.6	49.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.8	6.0		7.3	11.8		36.3	48.1	11.9	34.6	49.1	

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report

Page 4

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	B		D	D	B	C	D	
Approach Delay (s/veh)		6.2			11.3			35.6			46.4	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	9	28		30	148		40	71	0	41	101	
Queue Length 95th (ft)	m22	42		64	221		71	104	49	73	143	
Internal Link Dist (ft)		2529			2488			391			583	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	388	3043		626	3190		280	971	513	295	896	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.22	0.21		0.23	0.37		0.25	0.21	0.21	0.24	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 18.1

Intersection LOS: B

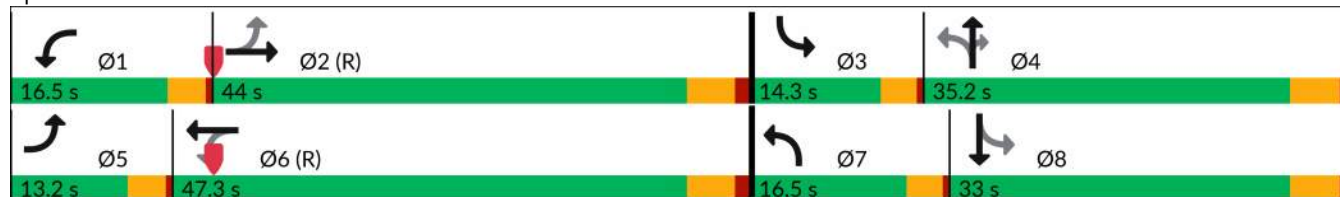
Intersection Capacity Utilization 53.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	85	639	146	1192	70	204	109	72	316
v/c Ratio	0.26	0.21	0.26	0.37	0.34	0.47	0.38	0.28	0.70
Control Delay (s/veh)	7.8	6.0	7.3	11.8	36.3	48.1	11.9	34.6	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.8	6.0	7.3	11.8	36.3	48.1	11.9	34.6	49.1
Queue Length 50th (ft)	9	28	30	148	40	71	0	41	101
Queue Length 95th (ft)	m22	42	64	221	71	104	49	73	143
Internal Link Dist (ft)		2529		2488		391			583
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	388	3043	626	3190	280	971	513	295	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.23	0.37	0.25	0.21	0.21	0.24	0.35

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00		1.00	1.00					1.00	0.99
Frt			0.990			0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5126	0	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.419			0.450			0.368	
Satd. Flow (perm)	0	546	5126	0	794	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			664			1574			367
Travel Time (s)			27.0			12.9			35.8			8.3
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	589	0	47	940	0	72	192	0	51	166
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		85.0	85.0		85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77		0.77	0.77		0.14	0.14		0.14	0.14

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
Page 7

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
Page 8

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.16	0.15		0.08	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.5		2.5	2.5		66.4	55.6		63.4	47.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.5		2.5	2.5		66.4	55.6		63.4	47.0
LOS		A	A		A	A		E	E		E	D
Approach Delay (s/veh)			3.7			2.5			58.6			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	31		4	47		49	117		34	94
Queue Length 95th (ft)		29	53		10	53		94	183		72	154
Internal Link Dist (ft)			1308			584			1494			287
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		421	3966		613	2763		260	566		212	562
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.15		0.08	0.34		0.28	0.34		0.24	0.30

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 14.8

Intersection LOS: B

Intersection Capacity Utilization 71.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Washington St & Lomas Blvd





Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	589	47	940	72	192	51	166
v/c Ratio	0.16	0.15	0.08	0.34	0.62	0.73	0.54	0.62
Control Delay (s/veh)	5.1	3.5	2.5	2.5	66.4	55.6	63.4	47.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.1	3.5	2.5	2.5	66.4	55.6	63.4	47.0
Queue Length 50th (ft)	10	31	4	47	49	117	34	94
Queue Length 95th (ft)	29	53	10	53	94	183	72	154
Internal Link Dist (ft)		1308		584		1494		287
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	421	3966	613	2763	260	566	212	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.15	0.08	0.34	0.28	0.34	0.24	0.30
Intersection Summary								

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations		  				 	  					
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00	1.00		1.00	1.00		1.00
Frt		0.994					0.985			0.991		
Flt Protected	0.950					0.950			0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	0	1805	5095	0	1805	1881	0	1805
Flt Permitted	0.208					0.441			0.950			0.950
Satd. Flow (perm)	395	5156	0	0	0	834	5095	0	1800	1881	0	1802
Right Turn on Red			Yes					Yes			Yes	
Satd. Flow (RTOR)		1					15			2		
Link Speed (mph)		35					35			30		
Link Distance (ft)		2652					1302			705		
Travel Time (s)		51.7					25.4			16.0		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	0	100	957	0	41	200	0	84
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Split	NA		Split
Protected Phases	5	2			1	1	6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5		24.0
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0		22.0
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%		20.0%
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5		16.5
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0				3.5	5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lead	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	None	Max		None	None		None
Walk Time (s)		7.0					7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0					21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0					0		0	0		0
Act Effct Green (s)	46.7	37.1				48.6	39.8		14.7	14.7		14.0
Actuated g/C Ratio	0.42	0.34				0.44	0.36		0.13	0.13		0.13

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

					
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			135		
Link Speed (mph)	30			35	
Link Distance (ft)	634			376	
Travel Time (s)	14.4			7.3	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Turn Type	NA	pt+ov	custom	Prot	Prot
Protected Phases	4	3 4	3 4	3	3
Permitted Phases					
Detector Phase	4	3 4	3 4	3	3
Switch Phase					
Minimum Initial (s)	8.0			8.0	8.0
Minimum Split (s)	24.0			22.0	22.0
Total Split (s)	22.0			22.0	22.0
Total Split (%)	20.0%			20.0%	20.0%
Maximum Green (s)	16.5			17.5	17.5
Yellow Time (s)	3.5			3.5	3.5
All-Red Time (s)	2.0			1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0
Total Lost Time (s)	5.5			4.5	4.5
Lead/Lag	Lag			Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes
Vehicle Extension (s)	2.0			2.0	2.0
Recall Mode	None			None	None
Walk Time (s)	0.0				
Flash Don't Walk (s)	0.0				
Pedestrian Calls (#/hr)	0				
Act Effect Green (s)	14.0	31.0	31.0	11.5	11.5
Actuated g/C Ratio	0.13	0.28	0.28	0.10	0.10

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
Page 13

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
v/c Ratio	0.32	0.26				0.23	0.52		0.17	0.79		0.37
Control Delay (s/veh)	15.1	21.5				21.3	31.2		42.7	67.8		47.4
Queue Delay	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	15.1	21.5				21.3	31.2		42.7	67.8		47.4
LOS	B	C				C	C		D	E		D
Approach Delay (s/veh)		20.5					30.3			63.5		
Approach LOS		C					C			E		
Queue Length 50th (ft)	16	93				40	196		26	136		55
Queue Length 95th (ft)	30	143				86	286		58	#232		100
Internal Link Dist (ft)		2572					1222			625		
Turn Bay Length (ft)	95					100			112			130
Base Capacity (vph)	347	1739				498	1853		275	289		275
Starvation Cap Reductn	0	0				0	0		0	0		0
Spillback Cap Reductn	0	0				0	0		0	0		0
Storage Cap Reductn	0	0				0	0		0	0		0
Reduced v/c Ratio	0.24	0.26				0.20	0.52		0.15	0.69		0.31

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 34.9

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4	 Ø8
16.5 s	27.5 s	22 s	22 s	22 s
 Ø5	 Ø6			
16.5 s	27.5 s			



Lane Group	SBT	SBR	SBR2	NEL	NER
v/c Ratio	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
LOS	E	C	A	E	D
Approach Delay (s/veh)	38.2			54.7	
Approach LOS	D			D	
Queue Length 50th (ft)	122	52	0	80	35
Queue Length 95th (ft)	190	86	40	134	61
Internal Link Dist (ft)	554			296	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.20	0.23	0.40	0.21
Intersection Summary					

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	83	459	100	957	41	200	84	177	97	135	116	93
v/c Ratio	0.32	0.26	0.23	0.52	0.17	0.79	0.37	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	15.1	21.5	21.3	31.2	42.7	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.1	21.5	21.3	31.2	42.7	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Length 50th (ft)	16	93	40	196	26	136	55	122	52	0	80	35
Queue Length 95th (ft)	30	143	86	286	58	#232	100	190	86	40	134	61
Internal Link Dist (ft)		2572		1222		625		554			296	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	347	1739	498	1853	275	289	275	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.26	0.20	0.52	0.15	0.69	0.31	0.61	0.20	0.23	0.40	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0	128		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		0.99	1.00		1.00	1.00		1.00	0.99	
Frt		0.979			0.983			0.962			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	5053	0	1805	5078	0	1805	1820	0	1805	1799	0
Flt Permitted	0.269			0.425			0.271			0.611		
Satd. Flow (perm)	511	5053	0	803	5078	0	514	1820	0	1156	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24			15			19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1491			2652			1000			578	
Travel Time (s)		29.0			51.7			22.7			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	501	0	132	943	0	95	206	0	37	264	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		18.0			17.0			26.0			25.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	63.7	56.9		68.6	60.6		33.5	25.7		27.0	19.5	
Actuated g/C Ratio	0.58	0.52		0.62	0.55		0.30	0.23		0.25	0.18	

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.15	0.19		0.23	0.34		0.37	0.47		0.12	0.79	
Control Delay (s/veh)	11.0	15.1		2.9	2.9		29.9	36.9		24.9	56.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.0	15.1		2.9	2.9		29.9	36.9		24.9	56.6	
LOS	B	B		A	A		C	D		C	E	
Approach Delay (s/veh)		14.7			2.9			34.7			52.7	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	13	61		10	26		49	121		18	168	
Queue Length 95th (ft)	36	107		16	32		77	177		37	241	
Internal Link Dist (ft)		1411			2572			920			498	
Turn Bay Length (ft)	120			120			118			128		
Base Capacity (vph)	474	2630		625	2809		309	478		423	464	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.19		0.21	0.34		0.31	0.43		0.09	0.57	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 16.9

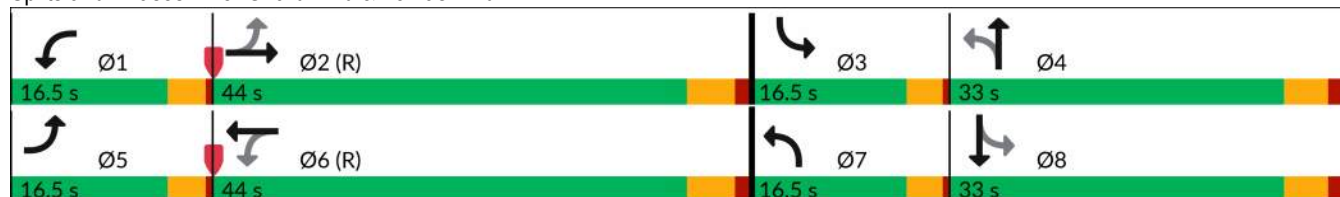
Intersection LOS: B

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	52	501	132	943	95	206	37	264
v/c Ratio	0.15	0.19	0.23	0.34	0.37	0.47	0.12	0.79
Control Delay (s/veh)	11.0	15.1	2.9	2.9	29.9	36.9	24.9	56.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.0	15.1	2.9	2.9	29.9	36.9	24.9	56.6
Queue Length 50th (ft)	13	61	10	26	49	121	18	168
Queue Length 95th (ft)	36	107	16	32	77	177	37	241
Internal Link Dist (ft)		1411		2572		920		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	474	2630	625	2809	309	478	423	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.19	0.21	0.34	0.31	0.43	0.09	0.57
Intersection Summary								

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 						 	
Traffic Volume (vph)	5	575	60	100	925	5	25	5	15	15	5	30
Future Volume (vph)	5	575	60	100	925	5	25	5	15	15	5	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			100			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.960			0.985	
Satd. Flow (prot)	1770	5014	0	1770	3536	0	0	1788	1583	0	1684	0
Flt Permitted	0.284			0.383				0.825			0.887	
Satd. Flow (perm)	529	5014	0	713	3536	0	0	1537	1583	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			1				20			32
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		664			2039			675			692	
Travel Time (s)		12.9			39.7			15.3			15.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	5	612	64	106	984	5	27	5	16	16	5	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	676	0	106	989	0	0	32	16	0	53	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effect Green (s)	95.3	95.3		95.3	95.3			8.3	8.3		8.3	
Actuated g/C Ratio	0.87	0.87		0.87	0.87			0.08	0.08		0.08	
v/c Ratio	0.01	0.16		0.17	0.32			0.28	0.12		0.37	
Control Delay (s/veh)	1.4	1.2		1.2	0.9			54.1	18.3		32.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.4	1.2		1.2	0.9			54.1	18.3		32.2	

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
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Lanes, Volumes, Timings

10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	A			D	B		C	
Approach Delay (s/veh)		1.2			1.0			42.2			32.2	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)	0	17		4	21			22	0		14	
Queue Length 95th (ft)	m2	22		m9	36			53	19		54	
Internal Link Dist (ft)		584			1959			595			612	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	458	4346		617	3062			468	496		484	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.01	0.16		0.17	0.32			0.07	0.03		0.11	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay (s/veh): 3.0

Intersection LOS: A

Intersection Capacity Utilization 61.2%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

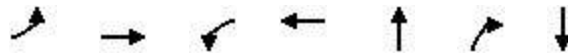
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	5	676	106	989	32	16	53
v/c Ratio	0.01	0.16	0.17	0.32	0.28	0.12	0.37
Control Delay (s/veh)	1.4	1.2	1.2	0.9	54.1	18.3	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.4	1.2	1.2	0.9	54.1	18.3	32.2
Queue Length 50th (ft)	0	17	4	21	22	0	14
Queue Length 95th (ft)	m2	22	m9	36	53	19	54
Internal Link Dist (ft)		584		1959	595		612
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	458	4346	617	3062	468	496	484
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.16	0.17	0.32	0.07	0.03	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (vph)	565	10	20	920	50	25
Future Volume (vph)	565	10	20	920	50	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5070	0	1770	5085	1770	1583
Flt Permitted			0.409		0.950	
Satd. Flow (perm)	5070	0	762	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	5					27
Link Speed (mph)	35			35	25	
Link Distance (ft)	1302			1388	612	
Travel Time (s)	25.4			27.0	16.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	601	11	21	979	53	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	612	0	21	979	53	27
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	44.7		44.7	44.7	8.1	8.1
Actuated g/C Ratio	0.81		0.81	0.81	0.15	0.15
v/c Ratio	0.15		0.03	0.24	0.21	0.11
Control Delay (s/veh)	2.5		3.3	2.8	22.9	10.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.5		3.3	2.8	22.9	10.0

Lomas Road Diet - Existing AM 7:30 am 05/20/2024

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	C	B
Approach Delay (s/veh)	2.5			2.8	18.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	21		2	36	19	0
Queue Length 95th (ft)	31		7	52	38	16
Internal Link Dist (ft)	1222			1308	532	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4104		616	4115	776	709
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.15		0.03	0.24	0.07	0.04

Intersection Summary

Area Type: Other

Cycle Length: 66

Actuated Cycle Length: 55.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.24

Intersection Signal Delay (s/veh): 3.4

Intersection LOS: A

Intersection Capacity Utilization 32.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↙	←	↖	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	612	21	979	53	27
v/c Ratio	0.15	0.03	0.24	0.21	0.11
Control Delay (s/veh)	2.5	3.3	2.8	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.5	3.3	2.8	22.9	10.0
Queue Length 50th (ft)	21	2	36	19	0
Queue Length 95th (ft)	31	7	52	38	16
Internal Link Dist (ft)	1222		1308	532	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4104	616	4115	776	709
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.03	0.24	0.07	0.04
Intersection Summary					

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	700	149	173	583	164	151	872	166	185	851	183
Future Volume (vph)	245	700	149	173	583	164	151	872	166	185	851	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	1.00	1.00		1.00		0.98	1.00	1.00		1.00	1.00	
Frt		0.974				0.850		0.976			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4941	0	1770	3539	1583	1770	4948	0	1770	4935	0
Flt Permitted	0.275			0.229			0.165			0.147		
Satd. Flow (perm)	511	4941	0	426	3539	1557	307	4948	0	273	4935	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				167		36			43	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2027			2610			672			669	
Travel Time (s)		39.5			44.5			11.5			11.4	
Confl. Peds. (#/hr)	5		2	2		5	3		8	8		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	250	714	152	177	595	167	154	890	169	189	868	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	866	0	177	595	167	154	1059	0	189	1055	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2		2	8			4		
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	38.5		9.5	39.5	39.5	9.5	39.5		9.5	36.5	
Total Split (s)	16.5	37.4		16.5	37.4	37.4	18.7	37.4		18.7	37.4	
Total Split (%)	15.0%	34.0%		15.0%	34.0%	34.0%	17.0%	34.0%		17.0%	34.0%	
Maximum Green (s)	13.0	31.9		13.0	31.9	31.9	15.2	31.9		15.2	31.9	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			27.0	27.0		27.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	48.5	34.6		45.3	33.0	33.0	47.9	36.1		50.3	37.3	
Actuated g/C Ratio	0.44	0.31		0.41	0.30	0.30	0.44	0.33		0.46	0.34	
v/c Ratio	0.69	0.55		0.59	0.56	0.29	0.59	0.64		0.69	0.62	
Control Delay (s/veh)	34.6	36.3		23.8	36.8	8.8	26.2	33.0		31.7	31.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	34.6	36.3		23.8	36.8	8.8	26.2	33.0		31.7	31.5	
LOS	C	D		C	D	A	C	C		C	C	
Approach Delay (s/veh)		35.9			29.3			32.1			31.5	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	132	196		92	211	23	60	223		76	216	
Queue Length 95th (ft)	191	241		55	274	88	101	290		132	284	
Internal Link Dist (ft)		1947			2530			592			589	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	375	1581		344	1061	584	346	1647		336	1703	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.67	0.55		0.51	0.56	0.29	0.45	0.64		0.56	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 58 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 32.3

Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Analysis Period (min) 15

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	866	177	595	167	154	1059	189	1055
v/c Ratio	0.69	0.55	0.59	0.56	0.29	0.59	0.64	0.69	0.62
Control Delay (s/veh)	34.6	36.3	23.8	36.8	8.8	26.2	33.0	31.7	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.6	36.3	23.8	36.8	8.8	26.2	33.0	31.7	31.5
Queue Length 50th (ft)	132	196	92	211	23	60	223	76	216
Queue Length 95th (ft)	191	241	55	274	88	101	290	132	284
Internal Link Dist (ft)		1947		2530			592		589
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	375	1581	344	1061	584	346	1647	336	1703
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.55	0.51	0.56	0.29	0.45	0.64	0.56	0.62
Intersection Summary									

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	747	93	101	663	83	127	263	141	134	287	146
Future Volume (vph)	158	747	93	101	663	83	127	263	141	134	287	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		1.00		0.99	1.00	0.99	
Frt		0.983			0.983				0.850		0.949	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4984	0	1770	4991	0	1770	3539	1583	1770	3341	0
Flt Permitted	0.312			0.295			0.255			0.485		
Satd. Flow (perm)	581	4984	0	548	4991	0	474	3539	1561	902	3341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			22				144		78	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2610			2606			477			652	
Travel Time (s)		44.5			44.4			9.3			12.7	
Confl. Peds. (#/hr)	1		11	11		1	3		2	2		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	161	762	95	103	677	85	130	268	144	137	293	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	857	0	103	762	0	130	268	144	137	442	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0	33.0	16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%	30.0%	15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	28.0	28.0	13.0	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	3.0	3.0	1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	68.4	58.6		65.0	56.9		29.1	17.5	17.5	29.5	17.7	
Actuated g/C Ratio	0.62	0.53		0.59	0.52		0.26	0.16	0.16	0.27	0.16	
v/c Ratio	0.36	0.32		0.26	0.29		0.53	0.48	0.39	0.42	0.73	
Control Delay (s/veh)	8.8	9.0		10.9	16.4		36.0	44.2	9.4	32.0	43.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.8	9.0		10.9	16.4		36.0	44.2	9.4	32.0	43.1	
LOS	A	A		B	B		D	D	A	C	D	
Approach Delay (s/veh)		8.9			15.8			33.0			40.5	
Approach LOS		A			B			C			D	
Queue Length 50th (ft)	27	54		26	104		69	92	0	73	130	
Queue Length 95th (ft)	m44	67		59	166		105	125	52	110	175	
Internal Link Dist (ft)		2530			2526			397			572	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	511	2663		491	2592		288	900	504	360	908	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.32	0.32		0.21	0.29		0.45	0.30	0.29	0.38	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 21.3

Intersection LOS: C

Intersection Capacity Utilization 63.8%

ICU Level of Service B

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 44 s	 Ø3 16.5 s	 Ø4 33 s
 Ø5 16.5 s	 Ø6 (R) 44 s	 Ø7 16.5 s	 Ø8 33 s

Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	857	103	762	130	268	144	137	442
v/c Ratio	0.36	0.32	0.26	0.29	0.53	0.48	0.39	0.42	0.73
Control Delay (s/veh)	8.8	9.0	10.9	16.4	36.0	44.2	9.4	32.0	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.8	9.0	10.9	16.4	36.0	44.2	9.4	32.0	43.1
Queue Length 50th (ft)	27	54	26	104	69	92	0	73	130
Queue Length 95th (ft)	m44	67	59	166	105	125	52	110	175
Internal Link Dist (ft)		2530		2526		397			572
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	511	2663	491	2592	288	900	504	360	908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.32	0.21	0.29	0.45	0.30	0.29	0.38	0.49

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	815	60	52	721	52	47	132	62	59	158
Future Volume (vph)	3	67	815	60	52	721	52	47	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.990			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3569	0	1805	1800	0	1805	1819
Flt Permitted		0.341			0.303			0.335			0.384	
Satd. Flow (perm)	0	648	5135	0	575	3569	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			19			12			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1378			660			1574			502
Travel Time (s)			26.8			12.9			35.8			11.4
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	832	61	53	736	53	48	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	893	0	53	789	0	48	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.23		0.12	0.29		0.51	0.68		0.55	0.75
Control Delay (s/veh)		5.4	4.3		3.3	2.8		59.4	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.4	4.3		3.3	2.8		59.4	50.5		60.3	56.5
LOS		A	A		A	A		E	D		E	E
Approach Delay (s/veh)			4.4			2.8			52.2			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	55		5	42		32	119		40	136
Queue Length 95th (ft)		32	90		12	52		68	183		81	204
Internal Link Dist (ft)			1298			580			1494			422
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		491	3895		435	2707		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.23		0.12	0.29		0.25	0.35		0.27	0.38
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.75												



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 15.1	Intersection LOS: B
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	893	53	789	48	198	60	215
v/c Ratio	0.14	0.23	0.12	0.29	0.51	0.68	0.55	0.75
Control Delay (s/veh)	5.4	4.3	3.3	2.8	59.4	50.5	60.3	56.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.4	4.3	3.3	2.8	59.4	50.5	60.3	56.5
Queue Length 50th (ft)	11	55	5	42	32	119	40	136
Queue Length 95th (ft)	32	90	12	52	68	183	81	204
Internal Link Dist (ft)		1298		580		1494		422
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	491	3895	435	2707	193	563	221	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.23	0.12	0.29	0.25	0.35	0.27	0.38
Intersection Summary								

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	644	33	2	31	79	603	96	1	46	217	41
Future Volume (vph)	117	644	33	2	31	79	603	96	1	46	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				1.00	1.00			0.98	1.00	
Frt		0.992					0.979				0.976	
Flt Protected	0.950					0.950				0.950		
Satd. Flow (prot)	1805	5140	0	0	0	1805	5060	0	0	1737	1850	0
Flt Permitted	0.275					0.297				0.631		
Satd. Flow (perm)	522	5140	0	0	0	562	5060	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							25				7	
Link Speed (mph)		35					35				30	
Link Distance (ft)		2652					1312				1176	
Travel Time (s)		51.7					25.6				26.7	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	657	34	2	32	81	615	98	1	47	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	693	0	0	0	113	713	0	0	48	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Perm	Split	NA	
Protected Phases	5	2			1	1	6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	1	6		8	8	8	

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	0.99				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1787	1900	1615	1615	1800	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				119		174	
Link Speed (mph)		30			35		
Link Distance (ft)		634			350		
Travel Time (s)		14.4			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	pt+ov	custom	Prot	Prot	
Protected Phases	4	4	3 4	3 4	3	3	
Permitted Phases							
Detector Phase	4	4	3 4	3 4	3	3	

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0	22.0	
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%	20.0%	
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5	16.5	
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0				0.0	0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0				3.5	5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	None	Max		None	None	None	
Walk Time (s)		7.0					7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0					21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0					0		0	0	0	
Act Effct Green (s)	42.7	31.4				42.2	31.7			18.3	18.3	
Actuated g/C Ratio	0.39	0.29				0.38	0.29			0.17	0.17	
v/c Ratio	0.39	0.47				0.36	0.48			0.26	0.84	
Control Delay (s/veh)	16.3	27.2				25.6	34.4			44.0	67.2	
Queue Delay	0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay (s/veh)	16.3	27.2				25.6	34.4			44.0	67.2	
LOS	B	C				C	C			D	E	
Approach Delay (s/veh)		25.6					33.2				63.7	
Approach LOS		C					C				E	
Queue Length 50th (ft)	59	161				52	154			29	171	
Queue Length 95th (ft)	33	215				95	210			68	#340	
Internal Link Dist (ft)		2572					1232				1096	
Turn Bay Length (ft)	95					100				112		
Base Capacity (vph)	366	1468				377	1475			190	316	
Starvation Cap Reductn	0	0				0	0			0	0	
Spillback Cap Reductn	0	0				0	0			0	0	
Storage Cap Reductn	0	0				0	0			0	0	
Reduced v/c Ratio	0.33	0.47				0.30	0.48			0.25	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 135												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.84												
Intersection Signal Delay (s/veh): 36.2	Intersection LOS: D											
Intersection Capacity Utilization 79.9%	ICU Level of Service D											
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0			8.0	8.0	
Minimum Split (s)	24.0	24.0			22.0	22.0	
Total Split (s)	22.0	22.0			22.0	22.0	
Total Split (%)	20.0%	20.0%			20.0%	20.0%	
Maximum Green (s)	16.5	16.5			17.5	17.5	
Yellow Time (s)	3.5	3.5			3.5	3.5	
All-Red Time (s)	2.0	2.0			1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.5	5.5			4.5	4.5	
Lead/Lag	Lag	Lag			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	
Recall Mode	None	None			None	None	
Walk Time (s)	0.0	0.0					
Flash Don't Walk (s)	0.0	0.0					
Pedestrian Calls (#/hr)	0	0					
Act Effect Green (s)	15.3	15.3	32.3	32.3	11.5	11.5	
Actuated g/C Ratio	0.14	0.14	0.29	0.29	0.10	0.10	
v/c Ratio	0.52	0.77	0.21	0.20	0.61	0.24	
Control Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
LOS	D	E	C	A	E	A	
Approach Delay (s/veh)		42.3			32.4		
Approach LOS		D			C		
Queue Length 50th (ft)	85	138	52	0	80	0	
Queue Length 95th (ft)	143	214	86	34	134	3	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	282	297	493	576	287	598	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.68	0.20	0.19	0.40	0.18	
Intersection Summary							

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	119	693	113	713	48	263	129	202	98	112	116	107
v/c Ratio	0.39	0.47	0.36	0.48	0.26	0.84	0.52	0.77	0.21	0.20	0.61	0.24
Control Delay (s/veh)	16.3	27.2	25.6	34.4	44.0	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.3	27.2	25.6	34.4	44.0	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Length 50th (ft)	59	161	52	154	29	171	85	138	52	0	80	0
Queue Length 95th (ft)	33	215	95	210	68	#340	143	214	86	34	134	3
Internal Link Dist (ft)		2572		1232		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	366	1468	377	1475	190	316	282	297	493	576	287	598
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.47	0.30	0.48	0.25	0.83	0.46	0.68	0.20	0.19	0.40	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	701	101	89	600	52	71	149	77	48	184
Future Volume (vph)	2	52	701	101	89	600	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.981			0.988			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5067	0	1805	5114	0	1805	1792	0	1805	1807
Flt Permitted		0.377			0.301			0.272			0.407	
Satd. Flow (perm)	0	709	5067	0	571	5114	0	516	1792	0	772	1807
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			27			14			23			18
Link Speed (mph)			35			35			30			30
Link Distance (ft)			757			2652			971			578
Travel Time (s)			14.7			51.7			22.1			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	715	103	91	612	53	72	152	79	49	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	818	0	91	665	0	72	231	0	49	267
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

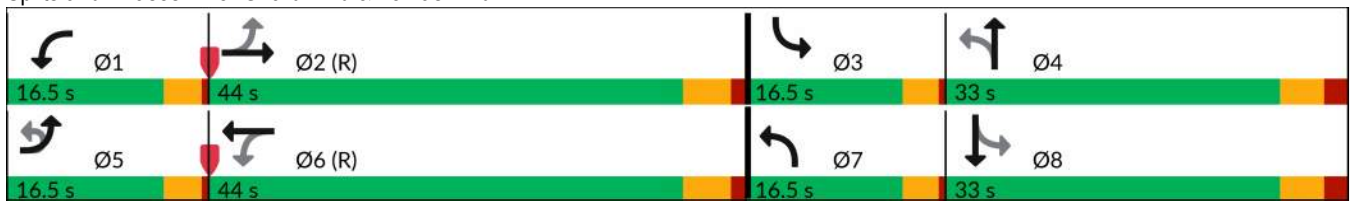
09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effect Green (s)		68.5	62.5		70.4	63.4		29.0	20.7		26.9	19.6
Actuated g/C Ratio		0.62	0.57		0.64	0.58		0.26	0.19		0.24	0.18
v/c Ratio		0.11	0.28		0.21	0.23		0.33	0.65		0.20	0.79
Control Delay (s/veh)		9.9	14.3		4.0	3.0		30.2	44.9		27.2	56.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.9	14.3		4.0	3.0		30.2	44.9		27.2	56.7
LOS		A	B		A	A		C	D		C	E
Approach Delay (s/veh)			14.0			3.1			41.4			52.1
Approach LOS			B			A			D			D
Queue Length 50th (ft)		13	106		8	22		37	137		25	170
Queue Length 95th (ft)		36	170		17	28		64	201		47	244
Internal Link Dist (ft)			677			2572			891			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		595	2890		520	2955		296	468		337	465
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.09	0.28		0.18	0.23		0.24	0.49		0.15	0.57
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B											
Intersection Capacity Utilization 60.3%	ICU Level of Service B											
Analysis Period (min) 15												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 8: Girard Blvd & Lomas Blvd





Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	818	91	665	72	231	49	267
v/c Ratio	0.11	0.28	0.21	0.23	0.33	0.65	0.20	0.79
Control Delay (s/veh)	9.9	14.3	4.0	3.0	30.2	44.9	27.2	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.9	14.3	4.0	3.0	30.2	44.9	27.2	56.7
Queue Length 50th (ft)	13	106	8	22	37	137	25	170
Queue Length 95th (ft)	36	170	17	28	64	201	47	244
Internal Link Dist (ft)		677		2572		891		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	595	2890	520	2955	296	468	337	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.28	0.18	0.23	0.24	0.49	0.15	0.57
Intersection Summary								

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 						 	
Traffic Volume (vph)	10	840	86	115	765	25	35	5	125	25	5	25
Future Volume (vph)	10	840	86	115	765	25	35	5	125	25	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.995				0.850		0.938	
Flt Protected	0.950			0.950				0.958			0.978	
Satd. Flow (prot)	1770	5014	0	1770	3522	0	0	1785	1583	0	1709	0
Flt Permitted	0.344			0.290				0.781			0.834	
Satd. Flow (perm)	641	5014	0	540	3522	0	0	1455	1583	0	1457	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			5				128		26	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		660			2027			703			672	
Travel Time (s)		12.9			39.5			16.0			15.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	10	857	88	117	781	26	36	5	128	26	5	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	945	0	117	807	0	0	41	128	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	91.2	91.2		91.2	91.2			8.8	8.8		8.8	
Actuated g/C Ratio	0.83	0.83		0.83	0.83			0.08	0.08		0.08	
v/c Ratio	0.02	0.23		0.26	0.28			0.35	0.52		0.41	
Control Delay (s/veh)	1.5	1.6		3.5	2.2			56.3	16.5		38.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.5	1.6		3.5	2.2			56.3	16.5		38.5	
LOS	A	A		A	A			E	B		D	
Approach Delay (s/veh)		1.6			2.4			26.2			38.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	16		15	54			28	0		21	
Queue Length 95th (ft)	m3	20		m25	58			63	57		61	
Internal Link Dist (ft)		580			1947			623			592	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	531	4162		447	2920			443	571		461	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.23		0.26	0.28			0.09	0.22		0.12	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 60												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.52												
Intersection Signal Delay (s/veh): 4.9						Intersection LOS: A						
Intersection Capacity Utilization 57.6%						ICU Level of Service B						
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

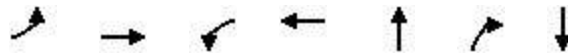
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	10	945	117	807	41	128	57
v/c Ratio	0.02	0.23	0.26	0.28	0.35	0.52	0.41
Control Delay (s/veh)	1.5	1.6	3.5	2.2	56.3	16.5	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.5	1.6	3.5	2.2	56.3	16.5	38.5
Queue Length 50th (ft)	1	16	15	54	28	0	21
Queue Length 95th (ft)	m3	20	m25	58	63	57	61
Internal Link Dist (ft)		580		1947	623		592
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	531	4162	447	2920	443	571	461
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.23	0.26	0.28	0.09	0.22	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (vph)	905	10	10	814	10	40
Future Volume (vph)	905	10	10	814	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5075	0	1770	5085	1770	1583
Flt Permitted			0.294		0.950	
Satd. Flow (perm)	5075	0	548	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					41
Link Speed (mph)	35			35	25	
Link Distance (ft)	1312			1378	612	
Travel Time (s)	25.6			26.8	16.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	923	10	10	831	10	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	933	0	10	831	10	41
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4

Lomas Road Diet - Existing MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	48.5		48.5	48.5	8.1	8.1
Actuated g/C Ratio	0.88		0.88	0.88	0.15	0.15
v/c Ratio	0.21		0.02	0.19	0.04	0.15
Control Delay (s/veh)	1.9		2.7	1.8	22.0	10.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.9		2.7	1.8	22.0	10.1
LOS	A		A	A	C	B
Approach Delay (s/veh)	1.9			1.8	12.4	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0		0	0	3	0
Queue Length 95th (ft)	48		4	42	14	21
Internal Link Dist (ft)	1232			1298	532	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4461		482	4470	775	716
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.21		0.02	0.19	0.01	0.06

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.21	
Intersection Signal Delay (s/veh): 2.1	Intersection LOS: A
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	933	10	831	10	41
v/c Ratio	0.21	0.02	0.19	0.04	0.15
Control Delay (s/veh)	1.9	2.7	1.8	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.9	2.7	1.8	22.0	10.1
Queue Length 50th (ft)	0	0	0	3	0
Queue Length 95th (ft)	48	4	42	14	21
Internal Link Dist (ft)	1232		1298	532	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4461	482	4470	775	716
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.02	0.19	0.01	0.06
Intersection Summary					

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	690	119	173	573	164	121	872	166	185	851	183
Future Volume (vph)	245	690	119	173	573	164	121	872	166	185	851	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	1.00	1.00		1.00		0.98	1.00	1.00		1.00	1.00	
Frt		0.978				0.850		0.976			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4963	0	1770	3539	1583	1770	4948	0	1770	4935	0
Flt Permitted	0.282			0.248			0.177			0.142		
Satd. Flow (perm)	524	4963	0	462	3539	1557	330	4948	0	264	4935	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				167		36			43	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2027			2610			672			669	
Travel Time (s)		39.5			44.5			11.5			11.4	
Confl. Peds. (#/hr)	5		2	2		5	3		8	8		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	250	704	121	177	585	167	123	890	169	189	868	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	825	0	177	585	167	123	1059	0	189	1055	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2		2	8			4		
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	38.5		9.5	39.5	39.5	9.5	39.5		9.5	36.5	
Total Split (s)	16.5	37.4		16.5	37.4	37.4	18.7	37.4		18.7	37.4	
Total Split (%)	15.0%	34.0%		15.0%	34.0%	34.0%	17.0%	34.0%		17.0%	34.0%	
Maximum Green (s)	13.0	31.9		13.0	31.9	31.9	15.2	31.9		15.2	31.9	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			27.0	27.0		27.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	48.5	34.6		45.3	33.0	33.0	46.5	36.1		51.7	38.7	
Actuated g/C Ratio	0.44	0.31		0.41	0.30	0.30	0.42	0.33		0.47	0.35	
v/c Ratio	0.68	0.52		0.57	0.55	0.29	0.49	0.64		0.69	0.60	
Control Delay (s/veh)	34.2	36.3		23.0	36.5	8.8	23.6	32.9		31.4	30.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	34.2	36.3		23.0	36.5	8.8	23.6	32.9		31.4	30.0	
LOS	C	D		C	D	A	C	C		C	C	
Approach Delay (s/veh)		35.8			28.9			32.0			30.2	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	131	187		91	206	22	47	223		76	212	
Queue Length 95th (ft)	191	230		55	270	88	82	290		129	274	
Internal Link Dist (ft)		1947			2530			592			589	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	380	1581		355	1061	584	354	1649		334	1764	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.66	0.52		0.50	0.55	0.29	0.35	0.64		0.57	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 58 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 31.8

Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Analysis Period (min) 15

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	825	177	585	167	123	1059	189	1055
v/c Ratio	0.68	0.52	0.57	0.55	0.29	0.49	0.64	0.69	0.60
Control Delay (s/veh)	34.2	36.3	23.0	36.5	8.8	23.6	32.9	31.4	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.2	36.3	23.0	36.5	8.8	23.6	32.9	31.4	30.0
Queue Length 50th (ft)	131	187	91	206	22	47	223	76	212
Queue Length 95th (ft)	191	230	55	270	88	82	290	129	274
Internal Link Dist (ft)		1947		2530			592		589
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	380	1581	355	1061	584	354	1649	334	1764
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.52	0.50	0.55	0.29	0.35	0.64	0.57	0.60
Intersection Summary									

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	742	88	101	658	83	122	263	141	134	287	146
Future Volume (vph)	158	742	88	101	658	83	122	263	141	134	287	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		1.00		0.99	1.00	0.99	
Frt		0.984			0.983				0.850		0.949	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4990	0	1770	4991	0	1770	3539	1583	1770	3341	0
Flt Permitted	0.316			0.299			0.259			0.474		
Satd. Flow (perm)	588	4990	0	555	4991	0	482	3539	1561	882	3341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			22				144		78	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2610			2606			477			652	
Travel Time (s)		44.5			44.4			9.3			12.7	
Confl. Peds. (#/hr)	1		11	11		1	3		2	2		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	161	757	90	103	671	85	124	268	144	137	293	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	847	0	103	756	0	124	268	144	137	442	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0	33.0	16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%	30.0%	15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	28.0	28.0	13.0	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	3.0	3.0	1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	68.6	58.8		65.4	57.2		28.5	17.2	17.2	29.5	17.7	
Actuated g/C Ratio	0.62	0.53		0.59	0.52		0.26	0.16	0.16	0.27	0.16	
v/c Ratio	0.35	0.32		0.26	0.29		0.52	0.48	0.39	0.43	0.73	
Control Delay (s/veh)	8.8	8.9		10.8	16.2		35.6	44.6	9.5	32.3	43.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.8	8.9		10.8	16.2		35.6	44.6	9.5	32.3	43.1	
LOS	A	A		B	B		D	D	A	C	D	
Approach Delay (s/veh)		8.9			15.6			33.1			40.5	
Approach LOS		A			B			C			D	
Queue Length 50th (ft)	0	53		26	101		66	92	0	74	130	
Queue Length 95th (ft)	m44	66		59	165		101	125	52	110	175	
Internal Link Dist (ft)		2530			2526			397			572	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	516	2678		496	2606		288	900	504	356	908	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.31	0.32		0.21	0.29		0.43	0.30	0.29	0.38	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 21.3

Intersection LOS: C

Intersection Capacity Utilization 63.5%

ICU Level of Service B

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 44 s	 Ø3 16.5 s	 Ø4 33 s
 Ø5 16.5 s	 Ø6 (R) 44 s	 Ø7 16.5 s	 Ø8 33 s

Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	847	103	756	124	268	144	137	442
v/c Ratio	0.35	0.32	0.26	0.29	0.52	0.48	0.39	0.43	0.73
Control Delay (s/veh)	8.8	8.9	10.8	16.2	35.6	44.6	9.5	32.3	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.8	8.9	10.8	16.2	35.6	44.6	9.5	32.3	43.1
Queue Length 50th (ft)	0	53	26	101	66	92	0	74	130
Queue Length 95th (ft)	m44	66	59	165	101	125	52	110	175
Internal Link Dist (ft)		2530		2526		397			572
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	516	2678	496	2606	288	900	504	356	908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.32	0.21	0.29	0.43	0.30	0.29	0.38	0.49

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5135	0	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.319			0.335			0.384	
Satd. Flow (perm)	0	678	5135	0	606	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1378			660			1574			502
Travel Time (s)			26.8			12.9			35.8			11.4
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	847	0	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		83.4	83.4		83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76		0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.22		0.12	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.3		2.8	2.4		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.3		2.8	2.4		52.7	50.5		60.3	56.5
LOS		A	A		A	A		D	D		E	E
Approach Delay (s/veh)			4.4			2.5			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	51		5	37		25	119		40	136
Queue Length 95th (ft)		32	85		11	44		56	183		81	204
Internal Link Dist (ft)			1298			580			1494			422
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		513	3895		459	2704		193	563		221	565
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.22		0.12	0.28		0.20	0.35		0.27	0.38
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.75												



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 15.1
 Intersection Capacity Utilization 70.6%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	847	53	748	38	198	60	215
v/c Ratio	0.14	0.22	0.12	0.28	0.40	0.68	0.55	0.75
Control Delay (s/veh)	5.3	4.3	2.8	2.4	52.7	50.5	60.3	56.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.3	4.3	2.8	2.4	52.7	50.5	60.3	56.5
Queue Length 50th (ft)	11	51	5	37	25	119	40	136
Queue Length 95th (ft)	32	85	11	44	56	183	81	204
Internal Link Dist (ft)		1298		580		1494		422
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	513	3895	459	2704	193	563	221	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.22	0.12	0.28	0.20	0.35	0.27	0.38
Intersection Summary								

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations		  					  				 	
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0			100		0		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				1.00	1.00			0.98	1.00	
Frt		0.992					0.978				0.976	
Flt Protected	0.950					0.950				0.950		
Satd. Flow (prot)	1805	5139	0	0	0	1805	5054	0	0	1738	1850	0
Flt Permitted	0.304					0.324				0.631		
Satd. Flow (perm)	578	5139	0	0	0	613	5054	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							28				7	
Link Speed (mph)		35					35				30	
Link Distance (ft)		2652					1312				1176	
Travel Time (s)		51.7					25.6				26.7	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	0	113	662	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Perm	Split	NA	
Protected Phases	5	2			1	1	6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	1	6		8	8	8	

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	0.99				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1787	1900	1615	1615	1800	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				119		174	
Link Speed (mph)		30			35		
Link Distance (ft)		634			350		
Travel Time (s)		14.4			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	pt+ov	custom	Prot	Prot	
Protected Phases	4	4	3 4	3 4	3	3	
Permitted Phases							
Detector Phase	4	4	3 4	3 4	3	3	

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0	22.0	
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%	20.0%	
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5	16.5	
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0				0.0	0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0				3.5	5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	None	Max		None	None	None	
Walk Time (s)		7.0					7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0					21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0					0		0	0	0	
Act Effct Green (s)	42.7	31.4				42.2	31.7			18.3	18.3	
Actuated g/C Ratio	0.39	0.29				0.38	0.29			0.17	0.17	
v/c Ratio	0.37	0.44				0.35	0.45			0.15	0.84	
Control Delay (s/veh)	16.4	27.4				25.2	33.6			41.6	67.2	
Queue Delay	0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay (s/veh)	16.4	27.4				25.2	33.6			41.6	67.2	
LOS	B	C				C	C			D	E	
Approach Delay (s/veh)		25.7					32.4				64.8	
Approach LOS		C					C				E	
Queue Length 50th (ft)	61	150				52	140			17	171	
Queue Length 95th (ft)	34	200				95	194			45	#340	
Internal Link Dist (ft)		2572					1232				1096	
Turn Bay Length (ft)	95					100				112		
Base Capacity (vph)	383	1467				392	1475			190	316	
Starvation Cap Reductn	0	0				0	0			0	0	
Spillback Cap Reductn	0	0				0	0			0	0	
Storage Cap Reductn	0	0				0	0			0	0	
Reduced v/c Ratio	0.31	0.44				0.29	0.45			0.15	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 135												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.84												
Intersection Signal Delay (s/veh): 36.1						Intersection LOS: D						
Intersection Capacity Utilization 79.9%						ICU Level of Service D						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0			8.0	8.0	
Minimum Split (s)	24.0	24.0			22.0	22.0	
Total Split (s)	22.0	22.0			22.0	22.0	
Total Split (%)	20.0%	20.0%			20.0%	20.0%	
Maximum Green (s)	16.5	16.5			17.5	17.5	
Yellow Time (s)	3.5	3.5			3.5	3.5	
All-Red Time (s)	2.0	2.0			1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.5	5.5			4.5	4.5	
Lead/Lag	Lag	Lag			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	
Recall Mode	None	None			None	None	
Walk Time (s)	0.0	0.0					
Flash Don't Walk (s)	0.0	0.0					
Pedestrian Calls (#/hr)	0	0					
Act Effect Green (s)	15.3	15.3	32.3	32.3	11.5	11.5	
Actuated g/C Ratio	0.14	0.14	0.29	0.29	0.10	0.10	
v/c Ratio	0.52	0.77	0.21	0.20	0.61	0.24	
Control Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
LOS	D	E	C	A	E	A	
Approach Delay (s/veh)		42.3			32.4		
Approach LOS		D			C		
Queue Length 50th (ft)	85	138	52	0	80	0	
Queue Length 95th (ft)	143	214	86	34	134	3	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	282	297	493	576	287	598	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.68	0.20	0.19	0.40	0.18	
Intersection Summary							

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	119	647	113	662	28	263	129	202	98	112	116	107
v/c Ratio	0.37	0.44	0.35	0.45	0.15	0.84	0.52	0.77	0.21	0.20	0.61	0.24
Control Delay (s/veh)	16.4	27.4	25.2	33.6	41.6	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.4	27.4	25.2	33.6	41.6	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Length 50th (ft)	61	150	52	140	17	171	85	138	52	0	80	0
Queue Length 95th (ft)	34	200	95	194	45	#340	143	214	86	34	134	3
Internal Link Dist (ft)		2572		1232		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	383	1467	392	1475	190	316	282	297	493	576	287	598
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.29	0.45	0.15	0.83	0.46	0.68	0.20	0.19	0.40	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		0	118		0	128	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	1.00		1.00	1.00		1.00	0.99		1.00	1.00
Frt			0.980			0.987			0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5060	0	1805	5107	0	1805	1792	0	1805	1807
Flt Permitted		0.412			0.325			0.272			0.407	
Satd. Flow (perm)	0	774	5060	0	617	5107	0	516	1792	0	772	1807
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			30			16			23			18
Link Speed (mph)			35			35			30			30
Link Distance (ft)			757			2652			971			578
Travel Time (s)			14.7			51.7			22.1			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	757	0	91	594	0	72	231	0	49	267
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0		1	0		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0		36	0		36	36		36	36
Trailing Detector (ft)	0	3	0		2	0		1	1		3	3
Detector 1 Position(ft)	0	3	0		2	0		1	1		3	3
Detector 1 Size(ft)	20	33	6		34	6		35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2			6			4			8	
Detector Phase	5	5	2		1	6		7	4		3	8

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

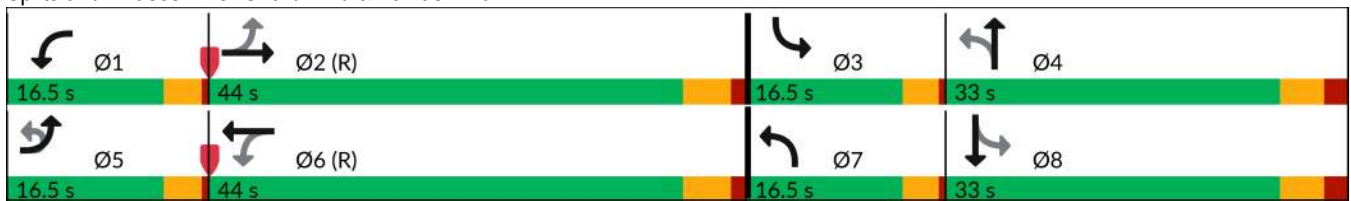
09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0		3.0	16.0		3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0		16.5	44.0		16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0		13.0	39.0		13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0		0.5	1.0		0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0		3.5	5.0		3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0		1.5	3.0		1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Walk Time (s)			7.0			7.0			7.0			7.0
Flash Don't Walk (s)			18.0			17.0			26.0			25.0
Pedestrian Calls (#/hr)			0			0			0			0
Act Effct Green (s)		68.5	62.5		70.4	63.4		29.0	20.7		26.9	19.6
Actuated g/C Ratio		0.62	0.57		0.64	0.58		0.26	0.19		0.24	0.18
v/c Ratio		0.10	0.26		0.20	0.20		0.33	0.65		0.20	0.79
Control Delay (s/veh)		9.8	14.0		3.7	2.8		30.2	44.9		27.2	56.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.8	14.0		3.7	2.8		30.2	44.9		27.2	56.7
LOS		A	B		A	A		C	D		C	E
Approach Delay (s/veh)			13.7			2.9			41.4			52.1
Approach LOS			B			A			D			D
Queue Length 50th (ft)		13	96		6	17		37	137		25	170
Queue Length 95th (ft)		36	155		15	22		64	201		47	244
Internal Link Dist (ft)			677			2572			891			498
Turn Bay Length (ft)		120			120			118			128	
Base Capacity (vph)		629	2887		545	2952		296	468		337	465
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.09	0.26		0.17	0.20		0.24	0.49		0.15	0.57
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 19.9						Intersection LOS: B						
Intersection Capacity Utilization 60.3%						ICU Level of Service B						
Analysis Period (min) 15												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 8: Girard Blvd & Lomas Blvd





Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	757	91	594	72	231	49	267
v/c Ratio	0.10	0.26	0.20	0.20	0.33	0.65	0.20	0.79
Control Delay (s/veh)	9.8	14.0	3.7	2.8	30.2	44.9	27.2	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.8	14.0	3.7	2.8	30.2	44.9	27.2	56.7
Queue Length 50th (ft)	13	96	6	17	37	137	25	170
Queue Length 95th (ft)	36	155	15	22	64	201	47	244
Internal Link Dist (ft)		677		2572		891		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	629	2887	545	2952	296	468	337	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.26	0.17	0.20	0.24	0.49	0.15	0.57
Intersection Summary								

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 						 	
Traffic Volume (vph)	10	800	86	115	725	25	35	5	125	25	5	25
Future Volume (vph)	10	800	86	115	725	25	35	5	125	25	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.995				0.850		0.938	
Flt Protected	0.950			0.950				0.958			0.978	
Satd. Flow (prot)	1770	5009	0	1770	3522	0	0	1785	1583	0	1709	0
Flt Permitted	0.360			0.303				0.781			0.834	
Satd. Flow (perm)	671	5009	0	564	3522	0	0	1455	1583	0	1457	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			6				128		26	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		660			2027			703			672	
Travel Time (s)		12.9			39.5			16.0			15.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	10	816	88	117	740	26	36	5	128	26	5	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	904	0	117	766	0	0	41	128	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	91.2	91.2		91.2	91.2			8.8	8.8		8.8	
Actuated g/C Ratio	0.83	0.83		0.83	0.83			0.08	0.08		0.08	
v/c Ratio	0.02	0.22		0.25	0.26			0.35	0.52		0.41	
Control Delay (s/veh)	1.5	1.5		3.5	2.3			56.3	16.5		38.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.5	1.5		3.5	2.3			56.3	16.5		38.5	
LOS	A	A		A	A			E	B		D	
Approach Delay (s/veh)		1.5			2.5			26.2			38.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	15		14	47			28	0		21	
Queue Length 95th (ft)	m3	19		m30	65			63	57		61	
Internal Link Dist (ft)		580			1947			623			592	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	556	4158		467	2920			443	571		461	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.22		0.25	0.26			0.09	0.22		0.12	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 60												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.52												
Intersection Signal Delay (s/veh): 5.0						Intersection LOS: A						
Intersection Capacity Utilization 56.5%						ICU Level of Service B						
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

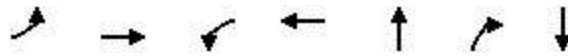
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	10	904	117	766	41	128	57
v/c Ratio	0.02	0.22	0.25	0.26	0.35	0.52	0.41
Control Delay (s/veh)	1.5	1.5	3.5	2.3	56.3	16.5	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.5	1.5	3.5	2.3	56.3	16.5	38.5
Queue Length 50th (ft)	1	15	14	47	28	0	21
Queue Length 95th (ft)	m3	19	m30	65	63	57	61
Internal Link Dist (ft)		580		1947	623		592
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	556	4158	467	2920	443	571	461
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.22	0.25	0.26	0.09	0.22	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (vph)	860	10	10	764	10	40
Future Volume (vph)	860	10	10	764	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5075	0	1770	5085	1770	1583
Flt Permitted			0.308		0.950	
Satd. Flow (perm)	5075	0	574	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					41
Link Speed (mph)	35			35	25	
Link Distance (ft)	1312			1378	612	
Travel Time (s)	25.6			26.8	16.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	878	10	10	780	10	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	888	0	10	780	10	41
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4

Lomas Road Diet - Existing MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
Page 31

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	48.5		48.5	48.5	8.1	8.1
Actuated g/C Ratio	0.88		0.88	0.88	0.15	0.15
v/c Ratio	0.20		0.02	0.17	0.04	0.15
Control Delay (s/veh)	1.8		2.7	1.8	22.0	10.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.8		2.7	1.8	22.0	10.1
LOS	A		A	A	C	B
Approach Delay (s/veh)	1.8			1.8	12.4	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0		0	0	3	0
Queue Length 95th (ft)	45		4	39	14	21
Internal Link Dist (ft)	1232			1298	532	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4461		504	4470	775	716
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.20		0.02	0.17	0.01	0.06

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.20	
Intersection Signal Delay (s/veh): 2.1	Intersection LOS: A
Intersection Capacity Utilization 31.8%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	888	10	780	10	41
v/c Ratio	0.20	0.02	0.17	0.04	0.15
Control Delay (s/veh)	1.8	2.7	1.8	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.8	2.7	1.8	22.0	10.1
Queue Length 50th (ft)	0	0	0	3	0
Queue Length 95th (ft)	45	4	39	14	21
Internal Link Dist (ft)	1232		1298	532	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4461	504	4470	775	716
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.02	0.17	0.01	0.06
Intersection Summary					

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	261	1077	163	151	766	237	164	1315	192	174	1052	177
Future Volume (vph)	261	1077	163	151	766	237	164	1315	192	174	1052	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.980				0.850		0.981			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4984	0	1770	3539	1583	1770	4989	0	1770	4973	0
Flt Permitted	0.171			0.117			0.119			0.098		
Satd. Flow (perm)	319	4984	0	218	3539	1583	222	4989	0	183	4973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				247		25			34	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2033			2599			649			665	
Travel Time (s)		39.6			44.3			11.1			11.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	1122	170	157	798	247	171	1370	200	181	1096	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	1292	0	157	798	247	171	1570	0	181	1280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	45.5	33.8		45.9	34.1	34.1	47.0	37.5		52.3	40.7	
Actuated g/C Ratio	0.41	0.31		0.42	0.31	0.31	0.43	0.34		0.48	0.37	
v/c Ratio	1.05	0.83		0.68	0.73	0.37	0.86	0.92		0.75	0.69	
Control Delay (s/veh)	94.2	40.6		41.6	30.1	3.6	57.9	44.3		40.1	30.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	94.2	40.6		41.6	30.1	3.6	57.9	44.3		40.1	30.8	
LOS	F	D		D	C	A	E	D		D	C	
Approach Delay (s/veh)		49.9			26.2			45.6			31.9	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	~151	316		34	280	41	66	379		71	269	
Queue Length 95th (ft)	#313	#420		116	351	5	#198	#532		145	322	
Internal Link Dist (ft)		1953			2519			569			585	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	259	1548		389	1097	661	200	1715		308	1861	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.05	0.83		0.40	0.73	0.37	0.86	0.92		0.59	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay (s/veh): 39.5

Intersection LOS: D

Intersection Capacity Utilization 90.8%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

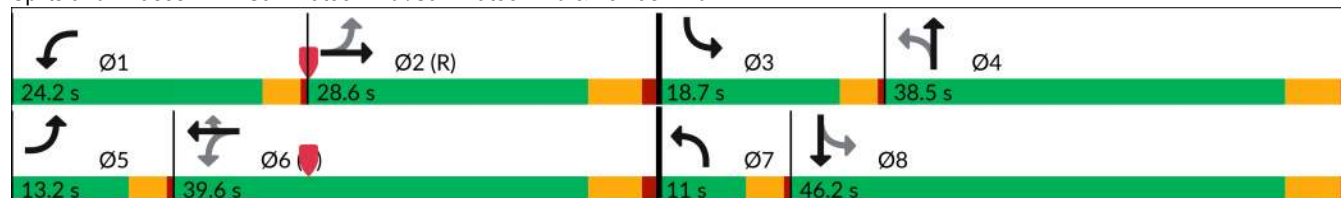
09/03/2025

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	272	1292	157	798	247	171	1570	181	1280
v/c Ratio	1.05	0.83	0.68	0.73	0.37	0.86	0.92	0.75	0.69
Control Delay (s/veh)	94.2	40.6	41.6	30.1	3.6	57.9	44.3	40.1	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	94.2	40.6	41.6	30.1	3.6	57.9	44.3	40.1	30.8
Queue Length 50th (ft)	~151	316	34	280	41	66	379	71	269
Queue Length 95th (ft)	#313	#420	116	351	5	#198	#532	145	322
Internal Link Dist (ft)		1953		2519			569		585
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	259	1548	389	1097	661	200	1715	308	1861
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.83	0.40	0.73	0.37	0.86	0.92	0.59	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	1110	82	119	847	89	172	481	274	171	412	118
Future Volume (vph)	185	1110	82	119	847	89	172	481	274	171	412	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.990			0.986				0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5034	0	1770	5014	0	1770	3539	1583	1770	3422	0
Flt Permitted	0.224			0.158			0.185			0.273		
Satd. Flow (perm)	417	5034	0	294	5014	0	345	3539	1583	509	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			19				239		32	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2599			2631			468			660	
Travel Time (s)		44.3			44.8			9.1			12.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	1156	85	124	882	93	179	501	285	178	429	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	193	1241	0	124	975	0	179	501	285	178	552	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	63.0	52.5		60.7	51.4		35.3	22.5	22.5	33.0	21.4	
Actuated g/C Ratio	0.57	0.48		0.55	0.47		0.32	0.20	0.20	0.30	0.19	
v/c Ratio	0.55	0.52		0.46	0.41		0.70	0.69	0.56	0.66	0.80	
Control Delay (s/veh)	13.1	13.7		17.2	20.9		40.0	45.3	11.8	37.9	48.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	13.1	13.7		17.2	20.9		40.0	45.3	11.8	37.9	48.7	
LOS	B	B		B	C		D	D	B	D	D	
Approach Delay (s/veh)		13.7			20.5			34.4			46.1	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	21	245		37	162		91	173	27	90	186	
Queue Length 95th (ft)	m40	m354		75	227		132	212	98	132	232	
Internal Link Dist (ft)		2519			2551			388			580	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	367	2408		347	2350		283	971	607	279	894	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.53	0.52		0.36	0.41		0.63	0.52	0.47	0.64	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 25.8

Intersection LOS: C

Intersection Capacity Utilization 69.5%

ICU Level of Service C

Analysis Period (min) 15

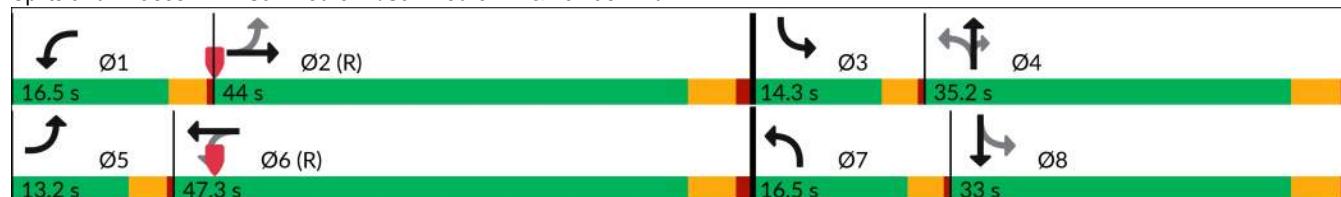
m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	193	1241	124	975	179	501	285	178	552
v/c Ratio	0.55	0.52	0.46	0.41	0.70	0.69	0.56	0.66	0.80
Control Delay (s/veh)	13.1	13.7	17.2	20.9	40.0	45.3	11.8	37.9	48.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	13.7	17.2	20.9	40.0	45.3	11.8	37.9	48.7
Queue Length 50th (ft)	21	245	37	162	91	173	27	90	186
Queue Length 95th (ft)	m40	m354	75	227	132	212	98	132	232
Internal Link Dist (ft)		2519		2551		388			580
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	367	2408	347	2350	283	971	607	279	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.52	0.36	0.41	0.63	0.52	0.47	0.64	0.62

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1115	84	85	1083	59	67	179	87	55	242
Future Volume (vph)	3	69	1115	84	85	1083	59	67	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.989			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5122	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.201			0.196			0.253			0.287	
Satd. Flow (perm)	0	382	5122	0	372	3577	0	479	1793	0	545	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			20			9			23			8
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1378			667			577			425
Travel Time (s)			26.8			13.0			13.1			9.7
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1161	88	89	1128	61	70	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1249	0	89	1189	0	70	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		78.4	78.4		78.4	78.4		21.6	21.6		21.6	21.6
Actuated g/C Ratio		0.71	0.71		0.71	0.71		0.20	0.20		0.20	0.20
v/c Ratio		0.28	0.34		0.34	0.47		0.74	0.75		0.54	0.79
Control Delay (s/veh)		10.4	6.7		6.5	3.8		82.9	50.1		56.5	55.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		10.4	6.7		6.5	3.8		82.9	50.1		56.5	55.7
LOS		B	A		A	A		F	D		E	E
Approach Delay (s/veh)			6.9			4.0			56.8			55.8
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	105		9	61		47	171		37	194
Queue Length 95th (ft)		52	165		14	60		#103	242		75	265
Internal Link Dist (ft)			1298			587			497			345
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		272	3655		265	2551		145	562		165	570
Starvation Cap Reductn		0	0		0	186		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.28	0.34		0.34	0.50		0.48	0.49		0.35	0.51
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 16.2

Intersection LOS: B

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	75	1249	89	1189	70	277	57	293
v/c Ratio	0.28	0.34	0.34	0.47	0.74	0.75	0.54	0.79
Control Delay (s/veh)	10.4	6.7	6.5	3.8	82.9	50.1	56.5	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.4	6.7	6.5	3.8	82.9	50.1	56.5	55.7
Queue Length 50th (ft)	17	105	9	61	47	171	37	194
Queue Length 95th (ft)	52	165	14	60	#103	242	75	265
Internal Link Dist (ft)		1298		587		497		345
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	272	3655	265	2551	145	562	165	570
Starvation Cap Reductn	0	0	0	186	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.34	0.34	0.50	0.48	0.49	0.35	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	979	59	20	107	920	92	51	263	31	117	236
Future Volume (vph)	137	979	59	20	107	920	92	51	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99	1.00		0.99	
Frt		0.992				0.986			0.984			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5138	0	0	1805	5100	0	1805	1866	0	1805	1900
Flt Permitted	0.136				0.135			0.950			0.950	
Satd. Flow (perm)	258	5138	0	0	256	5100	0	1787	1866	0	1786	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			30			30
Link Distance (ft)		2652				1312			1176			634
Travel Time (s)		51.7				25.6			26.7			14.4
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	1020	61	21	111	958	96	53	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	1081	0	0	132	1054	0	53	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases	5	2		1	1	6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	1	6		8	8		4	4

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		130		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	pt+ov	custom	Prot	Prot
Protected Phases	3 4	3 4	3	3
Permitted Phases				
Detector Phase	3 4	3 4	3	3

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	31.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.0%	25.0%		15.0%	15.0%	25.0%		20.0%	20.0%		20.0%	20.0%
Maximum Green (s)	14.5	24.0		14.5	14.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	0.5	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0			3.5	5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	None	Max		None	None		None	None
Walk Time (s)		7.0				7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0				21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0				0		0	0		0	0
Act Effct Green (s)	42.6	29.6			41.6	29.6		21.7	21.7		18.2	18.2
Actuated g/C Ratio	0.36	0.25			0.35	0.25		0.18	0.18		0.15	0.15
v/c Ratio	0.64	0.85			0.61	0.83		0.16	0.90		0.45	0.86
Control Delay (s/veh)	27.5	38.3			38.0	49.7		45.0	77.9		51.7	76.5
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.5	38.3			38.0	49.7		45.0	77.9		51.7	76.5
LOS	C	D			D	D		D	E		D	E
Approach Delay (s/veh)		37.0				48.4			73.1			46.8
Approach LOS		D				D			E			D
Queue Length 50th (ft)	35	304			69	285		36	237		85	183
Queue Length 95th (ft)	m66	#427			116	#404		75	#440		149	#325
Internal Link Dist (ft)		2572				1232			1096			554
Turn Bay Length (ft)	95				100			112			130	
Base Capacity (vph)	283	1268			282	1268		326	340		287	302
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.51	0.85			0.47	0.83		0.16	0.90		0.43	0.81
Intersection Summary												
Area Type: Other												
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 42 (35%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 120												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.90												
Intersection Signal Delay (s/veh): 48.0 Intersection LOS: D												
Intersection Capacity Utilization 85.2% ICU Level of Service E												
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)			8.0	8.0
Minimum Split (s)			22.0	22.0
Total Split (s)			24.0	24.0
Total Split (%)			20.0%	20.0%
Maximum Green (s)			19.5	19.5
Yellow Time (s)			3.5	3.5
All-Red Time (s)			1.0	1.0
Lost Time Adjust (s)			0.0	0.0
Total Lost Time (s)			4.5	4.5
Lead/Lag			Lead	Lead
Lead-Lag Optimize?			Yes	Yes
Vehicle Extension (s)			2.0	2.0
Recall Mode			None	None
Walk Time (s)				
Flash Don't Walk (s)				
Pedestrian Calls (#/hr)				
Act Effect Green (s)	39.3	39.3	15.6	15.6
Actuated g/C Ratio	0.33	0.33	0.13	0.13
v/c Ratio	0.29	0.21	0.77	0.39
Control Delay (s/veh)	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.5	5.2	71.6	50.1
LOS	C	A	E	D
Approach Delay (s/veh)			62.1	
Approach LOS			E	
Queue Length 50th (ft)	84	0	137	58
Queue Length 95th (ft)	137	41	210	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	528	615	293	461
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.21	0.62	0.31
Intersection Summary				

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 18 s	 Ø2 (R) 30 s	 Ø3 24 s	 Ø4 24 s	 Ø8 24 s
 Ø5 18 s	 Ø6 30 s			

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	143	1081	132	1054	53	306	122	246	153	130	181	144
v/c Ratio	0.64	0.85	0.61	0.83	0.16	0.90	0.45	0.86	0.29	0.21	0.77	0.39
Control Delay (s/veh)	27.5	38.3	38.0	49.7	45.0	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.5	38.3	38.0	49.7	45.0	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Length 50th (ft)	35	304	69	285	36	237	85	183	84	0	137	58
Queue Length 95th (ft)	m66	#427	116	#404	75	#440	149	#325	137	41	210	92
Internal Link Dist (ft)		2572		1232		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	283	1268	282	1268	326	340	287	302	528	615	293	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.85	0.47	0.83	0.16	0.90	0.43	0.81	0.29	0.21	0.62	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	981	131	133	915	70	68	238	131	1	78	297
Future Volume (vph)	104	981	131	133	915	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.982			0.989			0.947				0.961
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1805	5066	0	1805	5118	0	1805	1787	0	0	1805	1811
Flt Permitted	0.215			0.166			0.193				0.232	
Satd. Flow (perm)	407	5066	0	315	5118	0	366	1787	0	0	436	1811
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		23			12			21				13
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1525			2652			1001				578
Travel Time (s)		29.7			51.7			22.8				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	1022	136	139	953	73	71	248	136	1	81	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	1158	0	139	1026	0	71	384	0	0	82	416
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	38.5		18.0	18.0	37.5
Total Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (%)	15.0%	43.0%		15.0%	43.0%		15.0%	27.0%		15.0%	15.0%	27.0%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	26.9		14.5	14.5	26.9
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effect Green (s)	64.6	55.9		66.9	57.0		40.5	32.4			41.3	32.8
Actuated g/C Ratio	0.54	0.47		0.56	0.48		0.34	0.27			0.34	0.27
v/c Ratio	0.36	0.49		0.50	0.42		0.34	0.77			0.35	0.83
Control Delay (s/veh)	16.0	23.6		25.7	4.3		28.5	50.0			28.3	54.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.0	23.6		25.7	4.3		28.5	50.0			28.3	54.7
LOS	B	C		C	A		C	D			C	D
Approach Delay (s/veh)		22.9			6.8			46.6				50.4
Approach LOS		C			A			D				D
Queue Length 50th (ft)	38	228		37	35		34	256			40	289
Queue Length 95th (ft)	67	286		m69	37		66	#417			75	#469
Internal Link Dist (ft)		1445			2572			921				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	403	2371		361	2438		307	497			323	503
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.27	0.49		0.39	0.42		0.23	0.77			0.25	0.83

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 92 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 24.6

Intersection LOS: C

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



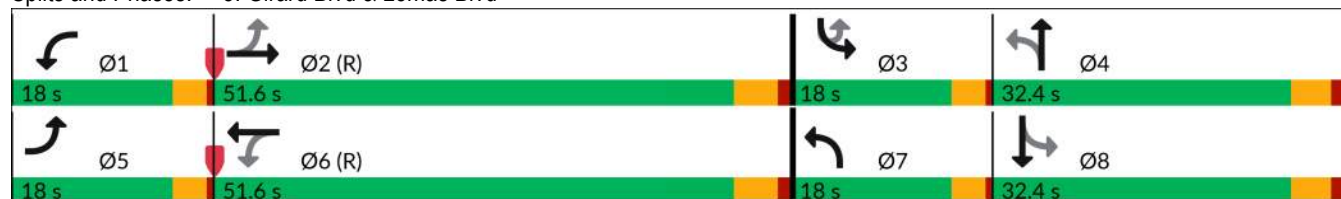
Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	1158	139	1026	71	384	82	416
v/c Ratio	0.36	0.49	0.50	0.42	0.34	0.77	0.35	0.83
Control Delay (s/veh)	16.0	23.6	25.7	4.3	28.5	50.0	28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.0	23.6	25.7	4.3	28.5	50.0	28.3	54.7
Queue Length 50th (ft)	38	228	37	35	34	256	40	289
Queue Length 95th (ft)	67	286	m69	37	66	#417	75	#469
Internal Link Dist (ft)		1445		2572		921		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	403	2371	361	2438	307	497	323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.49	0.39	0.42	0.23	0.77	0.25	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	1210	40	25	1170	10	25	5	150	50	5	20
Future Volume (vph)	7	1210	40	25	1170	10	25	5	150	50	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.964	
Flt Protected	0.950			0.950				0.960			0.968	
Satd. Flow (prot)	1770	5060	0	1770	3536	0	0	1788	1583	0	1738	0
Flt Permitted	0.210			0.194				0.757			0.781	
Satd. Flow (perm)	391	5060	0	361	3536	0	0	1410	1583	0	1402	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			1				68		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		667			2033			698			680	
Travel Time (s)		13.0			39.6			15.9			15.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	1260	42	26	1219	10	26	5	156	52	5	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1302	0	26	1229	0	0	31	156	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effect Green (s)	88.4	88.4		88.4	88.4			11.6	11.6		11.6	
Actuated g/C Ratio	0.80	0.80		0.80	0.80			0.11	0.11		0.11	
v/c Ratio	0.02	0.32		0.09	0.43			0.21	0.69		0.48	
Control Delay (s/veh)	2.4	2.3		2.4	2.2			46.4	41.7		45.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.4	2.3		2.4	2.2			46.4	41.7		45.3	
LOS	A	A		A	A			D	D		D	
Approach Delay (s/veh)		2.3			2.2			42.4			45.3	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	1	38		2	47			21	60		41	
Queue Length 95th (ft)	m2	60		m4	78			48	124		85	
Internal Link Dist (ft)		587			1953			618			600	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	314	4068		289	2841			429	529		438	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.32		0.09	0.43			0.07	0.29		0.18	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 60												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.69												
Intersection Signal Delay (s/veh): 6.1	Intersection LOS: A											
Intersection Capacity Utilization 52.7%	ICU Level of Service A											
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

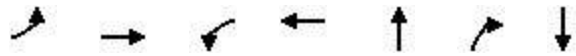
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	7	1302	26	1229	31	156	78
v/c Ratio	0.02	0.32	0.09	0.43	0.21	0.69	0.48
Control Delay (s/veh)	2.4	2.3	2.4	2.2	46.4	41.7	45.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.3	2.4	2.2	46.4	41.7	45.3
Queue Length 50th (ft)	1	38	2	47	21	60	41
Queue Length 95th (ft)	m2	60	m4	78	48	124	85
Internal Link Dist (ft)		587		1953	618		600
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	314	4068	289	2841	429	529	438
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.32	0.09	0.43	0.07	0.29	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (vph)	1235	30	53	1129	5	36
Future Volume (vph)	1235	30	53	1129	5	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5065	0	1770	5085	1770	1583
Flt Permitted			0.197		0.950	
Satd. Flow (perm)	5065	0	367	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7					30
Link Speed (mph)	35			35	25	
Link Distance (ft)	1312			1378	609	
Travel Time (s)	25.6			26.8	16.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1286	31	55	1176	5	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1317	0	55	1176	5	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4

Lomas Road Diet - Existing PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	49.2		49.2	49.2	8.1	8.1
Actuated g/C Ratio	0.88		0.88	0.88	0.15	0.15
v/c Ratio	0.29		0.17	0.26	0.02	0.15
Control Delay (s/veh)	2.0		4.0	1.9	22.6	13.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.0		4.0	1.9	22.6	13.3
LOS	A		A	A	C	B
Approach Delay (s/veh)	2.0			2.0	14.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0		0	0	1	2
Queue Length 95th (ft)	71		18	62	10	24
Internal Link Dist (ft)	1232			1298	529	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4470		324	4486	767	703
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.29		0.17	0.26	0.01	0.05

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.29	
Intersection Signal Delay (s/veh): 2.2	Intersection LOS: A
Intersection Capacity Utilization 50.4%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1317	55	1176	5	38
v/c Ratio	0.29	0.17	0.26	0.02	0.15
Control Delay (s/veh)	2.0	4.0	1.9	22.6	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.0	4.0	1.9	22.6	13.3
Queue Length 50th (ft)	0	0	0	1	2
Queue Length 95th (ft)	71	18	62	10	24
Internal Link Dist (ft)	1232		1298	529	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4470	324	4486	767	703
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.29	0.17	0.26	0.01	0.05
Intersection Summary					

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	261	1047	133	151	736	237	124	1315	192	174	1052	177
Future Volume (vph)	261	1047	133	151	736	237	124	1315	192	174	1052	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.983				0.850		0.981			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4999	0	1770	3539	1583	1770	4989	0	1770	4973	0
Flt Permitted	0.189			0.117			0.122			0.098		
Satd. Flow (perm)	352	4999	0	218	3539	1583	227	4989	0	183	4973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				247		25			34	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		2033			2599			649			665	
Travel Time (s)		39.6			44.3			11.1			11.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	1091	139	157	767	247	129	1370	200	181	1096	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	1230	0	157	767	247	129	1570	0	181	1280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	45.5	33.8		45.9	34.1	34.1	46.5	37.5		52.7	41.1	
Actuated g/C Ratio	0.41	0.31		0.42	0.31	0.31	0.42	0.34		0.48	0.37	
v/c Ratio	1.01	0.79		0.68	0.70	0.37	0.66	0.92		0.75	0.68	
Control Delay (s/veh)	82.4	39.1		41.5	29.1	3.7	35.7	44.3		39.9	30.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	82.4	39.1		41.5	29.1	3.7	35.7	44.3		39.9	30.4	
LOS	F	D		D	C	A	D	D		D	C	
Approach Delay (s/veh)		47.0			25.4			43.6			31.6	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	~140	298		33	267	51	49	379		71	269	
Queue Length 95th (ft)	#304	#387		117	335	4	#114	#532		145	322	
Internal Link Dist (ft)		1953			2519			569			585	
Turn Bay Length (ft)	150			200			250			225		
Base Capacity (vph)	270	1549		389	1097	661	202	1715		308	1880	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.01	0.79		0.40	0.70	0.37	0.64	0.92		0.59	0.68	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay (s/veh): 37.8

Intersection LOS: D

Intersection Capacity Utilization 90.0%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Lanes, Volumes, Timings

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

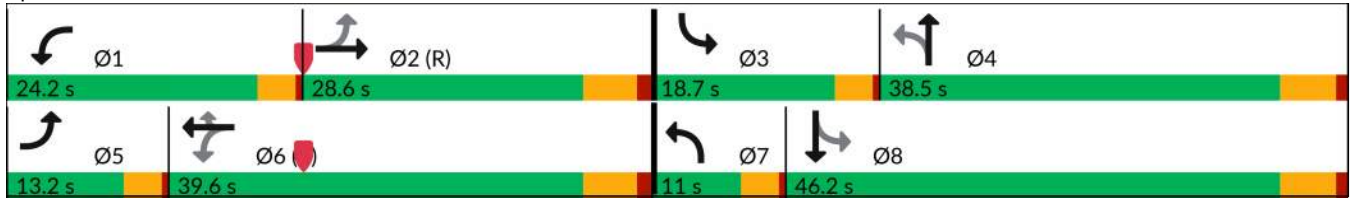
09/03/2025

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: San Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	272	1230	157	767	247	129	1570	181	1280
v/c Ratio	1.01	0.79	0.68	0.70	0.37	0.66	0.92	0.75	0.68
Control Delay (s/veh)	82.4	39.1	41.5	29.1	3.7	35.7	44.3	39.9	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	82.4	39.1	41.5	29.1	3.7	35.7	44.3	39.9	30.4
Queue Length 50th (ft)	~140	298	33	267	51	49	379	71	269
Queue Length 95th (ft)	#304	#387	117	335	4	#114	#532	145	322
Internal Link Dist (ft)		1953		2519			569		585
Turn Bay Length (ft)	150		200			250		225	
Base Capacity (vph)	270	1549	389	1097	661	202	1715	308	1880
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.79	0.40	0.70	0.37	0.64	0.92	0.59	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	1095	67	119	832	89	157	481	274	171	412	118
Future Volume (vph)	185	1095	67	119	832	89	157	481	274	171	412	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	175		0	135		250	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.991			0.985				0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5040	0	1770	5009	0	1770	3539	1583	1770	3422	0
Flt Permitted	0.230			0.167			0.190			0.264		
Satd. Flow (perm)	428	5040	0	311	5009	0	354	3539	1583	492	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			19				238		32	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2599			2631			468			660	
Travel Time (s)		44.3			44.8			9.1			12.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	1141	70	124	867	93	164	501	285	178	429	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	193	1211	0	124	960	0	164	501	285	178	552	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	63.3	52.9		60.9	51.7		34.6	22.2	22.2	33.2	21.5	
Actuated g/C Ratio	0.58	0.48		0.55	0.47		0.31	0.20	0.20	0.30	0.20	
v/c Ratio	0.54	0.50		0.45	0.41		0.65	0.70	0.56	0.67	0.80	
Control Delay (s/veh)	12.6	13.6		16.7	20.6		37.8	45.8	12.0	38.5	48.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	12.6	13.6		16.7	20.6		37.8	45.8	12.0	38.5	48.3	
LOS	B	B		B	C		D	D	B	D	D	
Approach Delay (s/veh)		13.5			20.2			34.3			45.9	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	20	227		36	156		83	175	28	91	186	
Queue Length 95th (ft)	m41	m343		75	224		122	212	99	132	232	
Internal Link Dist (ft)		2519			2551			388			580	
Turn Bay Length (ft)	100			175			135		250	100		
Base Capacity (vph)	374	2428		356	2363		284	971	607	276	894	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.52	0.50		0.35	0.41		0.58	0.52	0.47	0.64	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 25.6

Intersection LOS: C

Intersection Capacity Utilization 68.1%

ICU Level of Service C

Analysis Period (min) 15

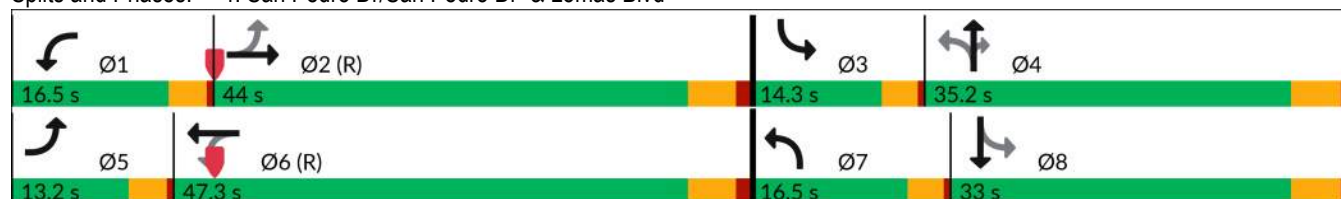
m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	193	1211	124	960	164	501	285	178	552
v/c Ratio	0.54	0.50	0.45	0.41	0.65	0.70	0.56	0.67	0.80
Control Delay (s/veh)	12.6	13.6	16.7	20.6	37.8	45.8	12.0	38.5	48.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.6	13.6	16.7	20.6	37.8	45.8	12.0	38.5	48.3
Queue Length 50th (ft)	20	227	36	156	83	175	28	91	186
Queue Length 95th (ft)	m41	m343	75	224	122	212	99	132	232
Internal Link Dist (ft)		2519		2551		388			580
Turn Bay Length (ft)	100		175		135		250	100	
Base Capacity (vph)	374	2428	356	2363	284	971	607	276	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.50	0.35	0.41	0.58	0.52	0.47	0.64	0.62

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		0	145		0	120		0	90	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00			1.00		1.00	0.99		1.00	1.00
Frt			0.990			0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	5128	0	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.222			0.214			0.253			0.287	
Satd. Flow (perm)	0	422	5128	0	407	3577	0	479	1793	0	545	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			18			10			23			8
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1378			667			577			425
Travel Time (s)			26.8			13.0			13.1			9.7
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1176	0	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	1		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100		20	100		37	37		36	36
Trailing Detector (ft)	0	0	0		0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0		0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6		20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA		Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2			2			4			4	
Detector Phase	2	2	2		2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0		16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5		71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5		66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0		4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max		C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0		0	0		0	0
Act Effect Green (s)		78.4	78.4		78.4	78.4		21.6	21.6		21.6	21.6
Actuated g/C Ratio		0.71	0.71		0.71	0.71		0.20	0.20		0.20	0.20
v/c Ratio		0.25	0.32		0.31	0.44		0.63	0.75		0.54	0.79
Control Delay (s/veh)		9.6	6.6		6.1	3.8		67.8	50.1		56.5	55.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.6	6.6		6.1	3.8		67.8	50.1		56.5	55.7
LOS		A	A		A	A		E	D		E	E
Approach Delay (s/veh)			6.8			4.0			53.2			55.8
Approach LOS			A			A			D			E
Queue Length 50th (ft)		16	97		9	59		39	171		37	194
Queue Length 95th (ft)		49	154		14	58		81	242		75	265
Internal Link Dist (ft)			1298			587			497			345
Turn Bay Length (ft)		113			145			120			90	
Base Capacity (vph)		300	3659		289	2551		145	562		165	570
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.32		0.31	0.44		0.41	0.49		0.35	0.51

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 16.1
Intersection Capacity Utilization 82.3%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service E

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	75	1176	89	1116	59	277	57	293
v/c Ratio	0.25	0.32	0.31	0.44	0.63	0.75	0.54	0.79
Control Delay (s/veh)	9.6	6.6	6.1	3.8	67.8	50.1	56.5	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.6	6.6	6.1	3.8	67.8	50.1	56.5	55.7
Queue Length 50th (ft)	16	97	9	59	39	171	37	194
Queue Length 95th (ft)	49	154	14	58	81	242	75	265
Internal Link Dist (ft)		1298		587		497		345
Turn Bay Length (ft)	113		145		120		90	
Base Capacity (vph)	300	3659	289	2551	145	562	165	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.32	0.31	0.44	0.41	0.49	0.35	0.51
Intersection Summary								

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0		100		0	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99	1.00		0.99	
Frt		0.993				0.985			0.984			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5145	0	0	1805	5094	0	1805	1866	0	1805	1900
Flt Permitted	0.136				0.135			0.950			0.950	
Satd. Flow (perm)	258	5145	0	0	256	5094	0	1787	1866	0	1786	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						14			4			
Link Speed (mph)		35				35			30			30
Link Distance (ft)		2652				1312			1176			634
Travel Time (s)		51.7				25.6			26.7			14.4
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	0	132	981	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases	5	2		1	1	6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	1	6		8	8		4	4

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		130		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	pt+ov	custom	Prot	Prot
Protected Phases	3 4	3 4	3	3
Permitted Phases				
Detector Phase	3 4	3 4	3	3

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	31.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.0%	25.0%		15.0%	15.0%	25.0%		20.0%	20.0%		20.0%	20.0%
Maximum Green (s)	14.5	24.0		14.5	14.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	0.5	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0			3.5	5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	None	Max		None	None		None	None
Walk Time (s)		7.0				7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0				21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0				0		0	0		0	0
Act Effct Green (s)	42.6	29.6			41.6	29.6		21.7	21.7		18.2	18.2
Actuated g/C Ratio	0.36	0.25			0.35	0.25		0.18	0.18		0.15	0.15
v/c Ratio	0.64	0.78			0.61	0.77		0.13	0.90		0.45	0.86
Control Delay (s/veh)	27.1	36.0			38.0	47.1		44.6	77.9		51.7	76.5
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	27.1	36.0			38.0	47.1		44.6	77.9		51.7	76.5
LOS	C	D			D	D		D	E		D	E
Approach Delay (s/veh)		34.9				46.0			73.8			46.8
Approach LOS		C				D			E			D
Queue Length 50th (ft)	38	275			69	259		29	237		85	183
Queue Length 95th (ft)	m60	#373			116	#358		64	#440		149	#325
Internal Link Dist (ft)		2572				1232			1096			554
Turn Bay Length (ft)	95				100			112			130	
Base Capacity (vph)	283	1269			282	1268		326	340		287	302
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.51	0.78			0.47	0.77		0.13	0.90		0.43	0.81
Intersection Summary												
Area Type:	Other											
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 42 (35%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 120												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.90												
Intersection Signal Delay (s/veh): 46.8						Intersection LOS: D						
Intersection Capacity Utilization 85.2%						ICU Level of Service E						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)			8.0	8.0
Minimum Split (s)			22.0	22.0
Total Split (s)			24.0	24.0
Total Split (%)			20.0%	20.0%
Maximum Green (s)			19.5	19.5
Yellow Time (s)			3.5	3.5
All-Red Time (s)			1.0	1.0
Lost Time Adjust (s)			0.0	0.0
Total Lost Time (s)			4.5	4.5
Lead/Lag			Lead	Lead
Lead-Lag Optimize?			Yes	Yes
Vehicle Extension (s)			2.0	2.0
Recall Mode			None	None
Walk Time (s)				
Flash Don't Walk (s)				
Pedestrian Calls (#/hr)				
Act Effect Green (s)	39.3	39.3	15.6	15.6
Actuated g/C Ratio	0.33	0.33	0.13	0.13
v/c Ratio	0.29	0.21	0.77	0.39
Control Delay (s/veh)	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.5	5.2	71.6	50.1
LOS	C	A	E	D
Approach Delay (s/veh)			62.1	
Approach LOS			E	
Queue Length 50th (ft)	84	0	137	58
Queue Length 95th (ft)	137	41	210	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	528	615	293	461
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.21	0.62	0.31
Intersection Summary				

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 18 s	 Ø2 (R) 30 s	 Ø3 24 s	 Ø4 24 s	 Ø8 24 s
 Ø5 18 s	 Ø6 30 s			

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	143	993	132	981	43	306	122	246	153	130	181	144
v/c Ratio	0.64	0.78	0.61	0.77	0.13	0.90	0.45	0.86	0.29	0.21	0.77	0.39
Control Delay (s/veh)	27.1	36.0	38.0	47.1	44.6	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.1	36.0	38.0	47.1	44.6	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Length 50th (ft)	38	275	69	259	29	237	85	183	84	0	137	58
Queue Length 95th (ft)	m60	#373	116	#358	64	#440	149	#325	137	41	210	92
Internal Link Dist (ft)		2572		1232		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	283	1269	282	1268	326	340	287	302	528	615	293	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.78	0.47	0.77	0.13	0.90	0.43	0.81	0.29	0.21	0.62	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations		  			  							
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		0	118		0		128	
Storage Lanes	1		0	1		0	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99		1.00	1.00		1.00	0.99			0.99	0.99
Frt		0.981			0.988			0.947				0.961
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1805	5059	0	1805	5111	0	1805	1787	0	0	1805	1811
Flt Permitted	0.247			0.191			0.193				0.232	
Satd. Flow (perm)	467	5059	0	362	5111	0	366	1787	0	0	436	1811
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		26			13			21				13
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1525			2652			1001				578
Travel Time (s)		29.7			51.7			22.8				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	1069	0	139	932	0	71	384	0	0	82	416
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0		1	0		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0		36	0		36	36		20	36	36
Trailing Detector (ft)	3	0		2	0		1	1		0	3	3
Detector 1 Position(ft)	3	0		2	0		1	1		0	3	3
Detector 1 Size(ft)	33	6		34	6		35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2			6			4			3	8	
Detector Phase	5	2		1	6		7	4		3	3	8

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6		18.0	51.6		18.0	38.5		18.0	18.0	37.5
Total Split (s)	18.0	51.6		18.0	51.6		18.0	32.4		18.0	18.0	32.4
Total Split (%)	15.0%	43.0%		15.0%	43.0%		15.0%	27.0%		15.0%	15.0%	27.0%
Maximum Green (s)	14.5	46.6		14.5	46.6		14.5	26.9		14.5	14.5	26.9
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Don't Walk (s)		18.0			17.0			26.0				25.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effect Green (s)	64.6	55.9		66.9	57.0		40.5	32.4			41.3	32.8
Actuated g/C Ratio	0.54	0.47		0.56	0.48		0.34	0.27			0.34	0.27
v/c Ratio	0.33	0.45		0.46	0.38		0.34	0.77			0.35	0.83
Control Delay (s/veh)	15.3	22.9		20.5	3.8		28.5	50.0			28.3	54.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	15.3	22.9		20.5	3.8		28.5	50.0			28.3	54.7
LOS	B	C		C	A		C	D			C	D
Approach Delay (s/veh)		22.2			5.9			46.6				50.4
Approach LOS		C			A			D				D
Queue Length 50th (ft)	38	205		32	30		34	256			40	289
Queue Length 95th (ft)	67	259		m68	32		66	#417			75	#469
Internal Link Dist (ft)		1445			2572			921				498
Turn Bay Length (ft)	120			120			118				128	
Base Capacity (vph)	430	2369		383	2435		307	497			323	503
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.25	0.45		0.36	0.38		0.23	0.77			0.25	0.83

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 92 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 24.6

Intersection LOS: C

Intersection Capacity Utilization 70.9%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

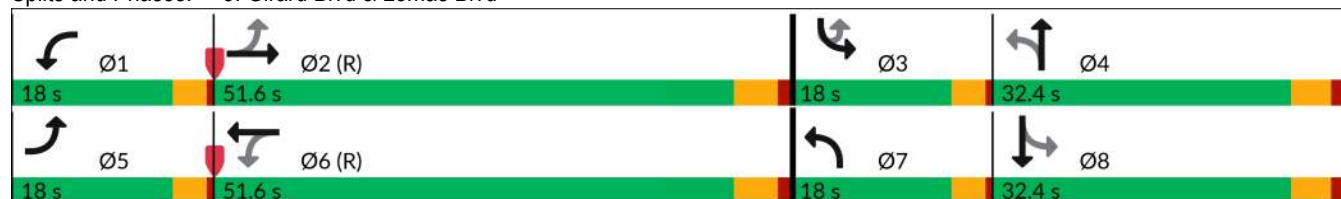
Queue shown is maximum after two cycles.



Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	1069	139	932	71	384	82	416
v/c Ratio	0.33	0.45	0.46	0.38	0.34	0.77	0.35	0.83
Control Delay (s/veh)	15.3	22.9	20.5	3.8	28.5	50.0	28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.3	22.9	20.5	3.8	28.5	50.0	28.3	54.7
Queue Length 50th (ft)	38	205	32	30	34	256	40	289
Queue Length 95th (ft)	67	259	m68	32	66	#417	75	#469
Internal Link Dist (ft)		1445		2572		921		498
Turn Bay Length (ft)	120		120		118		128	
Base Capacity (vph)	430	2369	383	2435	307	497	323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.45	0.36	0.38	0.23	0.77	0.25	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	1150	40	25	1100	10	25	5	150	50	5	20
Future Volume (vph)	7	1150	40	25	1100	10	25	5	150	50	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		0	85		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.964	
Flt Protected	0.950			0.950				0.960			0.968	
Satd. Flow (prot)	1770	5060	0	1770	3536	0	0	1788	1583	0	1738	0
Flt Permitted	0.229			0.208				0.751			0.781	
Satd. Flow (perm)	427	5060	0	387	3536	0	0	1399	1583	0	1402	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			1				78		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		667			2033			698			680	
Travel Time (s)		13.0			39.6			15.9			15.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	1198	42	26	1146	10	26	5	156	52	5	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1240	0	26	1156	0	0	31	156	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0		16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5		71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5		66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5		1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	88.8	88.8		88.8	88.8			11.2	11.2		11.2	
Actuated g/C Ratio	0.81	0.81		0.81	0.81			0.10	0.10		0.10	
v/c Ratio	0.02	0.30		0.08	0.40			0.22	0.68		0.50	
Control Delay (s/veh)	2.3	2.1		2.2	2.0			47.3	38.7		46.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.3	2.1		2.2	2.0			47.3	38.7		46.7	
LOS	A	A		A	A			D	D		D	
Approach Delay (s/veh)		2.1			2.0			40.1			46.7	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	1	36		2	41			21	54		42	
Queue Length 95th (ft)	m2	56		m4	72			48	117		86	
Internal Link Dist (ft)		587			1953			618			600	
Turn Bay Length (ft)	85			85								
Base Capacity (vph)	344	4087		312	2855			426	536		438	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.30		0.08	0.40			0.07	0.29		0.18	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 55												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.68												
Intersection Signal Delay (s/veh): 6.0						Intersection LOS: A						
Intersection Capacity Utilization 51.6%						ICU Level of Service A						
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

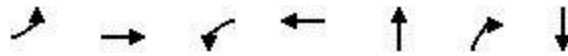
Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	7	1240	26	1156	31	156	78
v/c Ratio	0.02	0.30	0.08	0.40	0.22	0.68	0.50
Control Delay (s/veh)	2.3	2.1	2.2	2.0	47.3	38.7	46.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.3	2.1	2.2	2.0	47.3	38.7	46.7
Queue Length 50th (ft)	1	36	2	41	21	54	42
Queue Length 95th (ft)	m2	56	m4	72	48	117	86
Internal Link Dist (ft)		587		1953	618		600
Turn Bay Length (ft)	85		85				
Base Capacity (vph)	344	4087	312	2855	426	536	438
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.30	0.08	0.40	0.07	0.29	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (vph)	1165	30	53	1059	5	36
Future Volume (vph)	1165	30	53	1059	5	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5065	0	1770	5085	1770	1583
Flt Permitted			0.212		0.950	
Satd. Flow (perm)	5065	0	395	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8					37
Link Speed (mph)	35			35	25	
Link Distance (ft)	1312			1378	609	
Travel Time (s)	25.6			26.8	16.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1214	31	55	1103	5	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1245	0	55	1103	5	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases			2			4

Lomas Road Diet - Existing PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	23.0		23.0	23.0	35.0	35.0
Total Split (s)	37.0		37.0	37.0	29.0	29.0
Total Split (%)	56.1%		56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0		32.0	32.0	24.0	24.0
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	2.0	2.0
Recall Mode	Max		Max	Max	None	None
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0		10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	49.2		49.2	49.2	8.1	8.1
Actuated g/C Ratio	0.88		0.88	0.88	0.15	0.15
v/c Ratio	0.28		0.16	0.25	0.02	0.15
Control Delay (s/veh)	2.0		3.7	1.9	22.6	11.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.0		3.7	1.9	22.6	11.0
LOS	A		A	A	C	B
Approach Delay (s/veh)	2.0			2.0	12.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0		0	0	1	0
Queue Length 95th (ft)	66		17	58	10	22
Internal Link Dist (ft)	1232			1298	529	
Turn Bay Length (ft)			50			
Base Capacity (vph)	4470		348	4486	767	707
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.28		0.16	0.25	0.01	0.05

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay (s/veh): 2.2	Intersection LOS: A
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1245	55	1103	5	38
v/c Ratio	0.28	0.16	0.25	0.02	0.15
Control Delay (s/veh)	2.0	3.7	1.9	22.6	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.0	3.7	1.9	22.6	11.0
Queue Length 50th (ft)	0	0	0	1	0
Queue Length 95th (ft)	66	17	58	10	22
Internal Link Dist (ft)	1232		1298	529	
Turn Bay Length (ft)		50			
Base Capacity (vph)	4470	348	4486	767	707
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.25	0.01	0.05
Intersection Summary					

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	154	444	88	183	829	188	120	849	107	140	916	168
Future Volume (vph)	154	444	88	183	829	188	120	849	107	140	916	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		240	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.975				0.850		0.983			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4958	0	1770	3539	1583	1770	4999	0	1770	4968	0
Flt Permitted	0.142			0.340			0.154			0.170		
Satd. Flow (perm)	265	4958	0	633	3539	1583	287	4999	0	317	4968	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34				200		21			38	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		717			524			667			683	
Travel Time (s)		14.0			8.9			11.4			11.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	164	472	94	195	882	200	128	903	114	149	974	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	566	0	195	882	200	128	1017	0	149	1153	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		20			20			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	43.2	32.2		47.8	34.8	34.8	48.0	39.0		52.1	41.2	
Actuated g/C Ratio	0.39	0.29		0.43	0.32	0.32	0.44	0.35		0.47	0.37	
v/c Ratio	0.73	0.38		0.49	0.79	0.31	0.58	0.57		0.55	0.61	
Control Delay (s/veh)	38.9	30.7		14.1	31.6	5.7	27.4	30.0		23.8	28.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	38.9	30.7		14.1	31.6	5.7	27.4	30.0		23.8	28.7	
LOS	D	C		B	C	A	C	C		C	C	
Approach Delay (s/veh)		32.5			24.9			29.7			28.2	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	78	115		69	308	47	48	206		57	232	
Queue Length 95th (ft)	#159	160		36	385	53	84	265		96	282	
Internal Link Dist (ft)		637			444			587			603	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	238	1475		497	1120	637	227	1785		355	1884	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.69	0.38		0.39	0.79	0.31	0.56	0.57		0.42	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 28.3

Intersection LOS: C

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

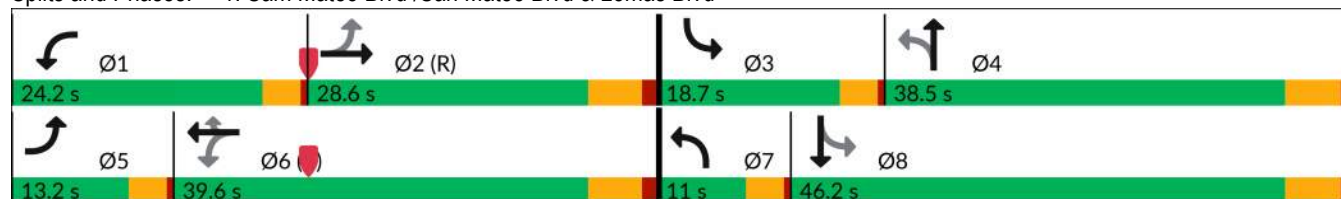
Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Queue shown is maximum after two cycles.

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	566	195	882	200	128	1017	149	1153
v/c Ratio	0.73	0.38	0.49	0.79	0.31	0.58	0.57	0.55	0.61
Control Delay (s/veh)	38.9	30.7	14.1	31.6	5.7	27.4	30.0	23.8	28.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	30.7	14.1	31.6	5.7	27.4	30.0	23.8	28.7
Queue Length 50th (ft)	78	115	69	308	47	48	206	57	232
Queue Length 95th (ft)	#159	160	36	385	53	84	265	96	282
Internal Link Dist (ft)		637		444			587		603
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	238	1475	497	1120	637	227	1785	355	1884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.38	0.39	0.79	0.31	0.56	0.57	0.42	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	560	51	137	1080	45	71	192	102	68	226	71
Future Volume (vph)	80	560	51	137	1080	45	71	192	102	68	226	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3412	0
Flt Permitted	0.193			0.386			0.355			0.582		
Satd. Flow (perm)	360	3539	1583	719	3539	1583	661	3539	1583	1084	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			109		37	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2080			2568			471			663	
Travel Time (s)		35.5			43.8			9.2			12.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	596	54	146	1149	48	76	204	109	72	240	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	596	54	146	1149	48	76	204	109	72	316	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		20			20			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

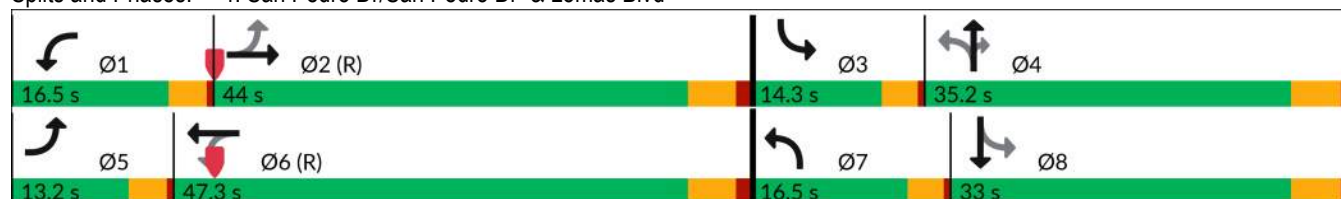
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	73.5	66.2	0.0	76.8	69.1	0.0	22.1	13.7	13.7	21.7	13.5	
Actuated g/C Ratio	0.67	0.60	0.00	0.70	0.63	0.00	0.20	0.12	0.12	0.20	0.12	
v/c Ratio	0.27	0.28	0.39	0.26	0.52	0.35	0.36	0.46	0.37	0.28	0.70	
Control Delay (s/veh)	8.0	7.0	16.7	7.4	14.4	6.7	36.5	47.5	11.7	34.3	49.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.0	7.0	16.7	7.4	14.4	6.7	36.5	47.5	11.7	34.3	49.1	
LOS	A	A	B	A	B	A	D	D	B	C	D	
Approach Delay (s/veh)		7.8			13.4			35.3			46.3	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	9	41	13	30	235	0	43	71	0	41	101	
Queue Length 95th (ft)	m22	60	m65	65	365	0	76	104	48	73	143	
Internal Link Dist (ft)		2000			2488			391			583	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	376	2129	139	636	2222	139	280	971	513	298	896	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.23	0.28	0.39	0.23	0.52	0.35	0.27	0.21	0.21	0.24	0.35	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 85												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.70												
Intersection Signal Delay (s/veh): 19.4						Intersection LOS: B						
Intersection Capacity Utilization 61.7%						ICU Level of Service B						
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	85	596	54	146	1149	48	76	204	109	72	316
v/c Ratio	0.27	0.28	0.39	0.26	0.52	0.35	0.36	0.46	0.37	0.28	0.70
Control Delay (s/veh)	8.0	7.0	16.7	7.4	14.4	6.7	36.5	47.5	11.7	34.3	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.0	7.0	16.7	7.4	14.4	6.7	36.5	47.5	11.7	34.3	49.1
Queue Length 50th (ft)	9	41	13	30	235	0	43	71	0	41	101
Queue Length 95th (ft)	m22	60	m65	65	365	0	76	104	48	73	143
Internal Link Dist (ft)	2000			2488			391			583	
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	376	2129	139	636	2222	139	280	971	513	298	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.28	0.39	0.23	0.52	0.35	0.27	0.21	0.21	0.24	0.35
Intersection Summary											
m Volume for 95th percentile queue is metered by upstream signal.											

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	550	44	44	866	53	78	124	56	48	99
Future Volume (vph)	1	61	550	44	44	866	53	78	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97	1.00	1.00					1.00	0.99
Frt				0.850		0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.276			0.431			0.450			0.368	
Satd. Flow (perm)	0	524	3610	1574	817	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				47		10			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			665			586			367
Travel Time (s)			27.0			13.0			13.3			8.3
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	585	47	47	921	56	83	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	585	47	47	977	0	83	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			20			20			20			20
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		37	37		36	36
Trailing Detector (ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		85.0	85.0	85.0	85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77	0.77	0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.21	0.04	0.07	0.35		0.72	0.73		0.54	0.62
Control Delay (s/veh)		5.2	4.0	1.3	2.4	2.5		76.2	55.6		63.4	47.0
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.2	4.0	1.3	2.4	2.5		76.2	55.6		63.4	47.0
LOS		A	A	A	A	A		E	E		E	D
Approach Delay (s/veh)			3.9			2.5			61.8			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	48	0	5	49		57	117		34	94
Queue Length 95th (ft)		30	84	10	9	54		106	183		72	154
Internal Link Dist (ft)			1308			585			506			287
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		404	2790	1227	631	2763		260	566		212	562
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.21	0.04	0.07	0.35		0.32	0.34		0.24	0.30

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 15.1
Intersection Capacity Utilization 72.2%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service C

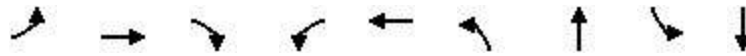
Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	585	47	47	977	83	192	51	166
v/c Ratio	0.16	0.21	0.04	0.07	0.35	0.72	0.73	0.54	0.62
Control Delay (s/veh)	5.2	4.0	1.3	2.4	2.5	76.2	55.6	63.4	47.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.2	4.0	1.3	2.4	2.5	76.2	55.6	63.4	47.0
Queue Length 50th (ft)	10	48	0	5	49	57	117	34	94
Queue Length 95th (ft)	30	84	10	9	54	106	183	72	154
Internal Link Dist (ft)		1308			585		506		287
Turn Bay Length (ft)	113		240	145		120		90	
Base Capacity (vph)	404	2790	1227	631	2763	260	566	212	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.21	0.04	0.07	0.35	0.32	0.34	0.24	0.30

Intersection Summary

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations		  				 	  					
Traffic Volume (vph)	78	455	18	4	20	74	855	89	54	177	11	79
Future Volume (vph)	78	455	18	4	20	74	855	89	54	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240			100		240	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00	1.00		1.00	1.00		1.00
Frt		0.993					0.986			0.991		
Flt Protected	0.950					0.950			0.950			0.950
Satd. Flow (prot)	1805	5151	0	0	0	1805	5101	0	1805	1881	0	1805
Flt Permitted	0.190					0.410			0.950			0.950
Satd. Flow (perm)	361	5151	0	0	0	776	5101	0	1800	1881	0	1802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)		1					14			2		
Link Speed (mph)		35					35			30		
Link Distance (ft)		678					662			1052		
Travel Time (s)		13.2					12.9			23.9		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	484	19	4	21	79	910	95	57	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	507	0	0	0	100	1005	0	57	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Split	NA		Split
Protected Phases	5	2			1	1	6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	1	6		8	8		4

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

					
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			135		
Link Speed (mph)	30			35	
Link Distance (ft)	634			376	
Travel Time (s)	14.4			7.3	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	pt+ov	custom	Prot	Prot
Protected Phases	4	3 4	3 4	3	3
Permitted Phases					
Detector Phase	4	3 4	3 4	3	3

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5		24.0
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0		22.0
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%		20.0%
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5		16.5
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0				3.5	5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lead	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	None	Max		None	None		None
Walk Time (s)		7.0					7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0					21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0					0		0	0		0
Act Effct Green (s)	46.7	37.1				48.6	39.8		14.7	14.7		14.0
Actuated g/C Ratio	0.42	0.34				0.44	0.36		0.13	0.13		0.13
v/c Ratio	0.34	0.29				0.24	0.54		0.24	0.79		0.37
Control Delay (s/veh)	14.9	19.9				21.4	31.8		44.0	67.8		47.4
Queue Delay	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	14.9	19.9				21.4	31.8		44.0	67.8		47.4
LOS	B	B				C	C		D	E		D
Approach Delay (s/veh)		19.2					30.8			62.5		
Approach LOS		B					C			E		
Queue Length 50th (ft)	14	103				40	209		36	136		55
Queue Length 95th (ft)	26	156				86	#307		75	#232		100
Internal Link Dist (ft)		598					582			972		
Turn Bay Length (ft)	95					100			112			130
Base Capacity (vph)	336	1737				479	1854		275	289		275
Starvation Cap Reductn	0	0				0	0		0	0		0
Spillback Cap Reductn	0	0				0	0		0	0		0
Storage Cap Reductn	0	0				0	0		0	0		0
Reduced v/c Ratio	0.25	0.29				0.21	0.54		0.21	0.69		0.31

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 34.6

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0			8.0	8.0
Minimum Split (s)	24.0			22.0	22.0
Total Split (s)	22.0			22.0	22.0
Total Split (%)	20.0%			20.0%	20.0%
Maximum Green (s)	16.5			17.5	17.5
Yellow Time (s)	3.5			3.5	3.5
All-Red Time (s)	2.0			1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0
Total Lost Time (s)	5.5			4.5	4.5
Lead/Lag	Lag			Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes
Vehicle Extension (s)	2.0			2.0	2.0
Recall Mode	None			None	None
Walk Time (s)	0.0				
Flash Don't Walk (s)	0.0				
Pedestrian Calls (#/hr)	0				
Act Effect Green (s)	14.0	31.0	31.0	11.5	11.5
Actuated g/C Ratio	0.13	0.28	0.28	0.10	0.10
v/c Ratio	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
LOS	E	C	A	E	D
Approach Delay (s/veh)	38.2			54.7	
Approach LOS	D			D	
Queue Length 50th (ft)	122	52	0	80	35
Queue Length 95th (ft)	190	86	40	134	61
Internal Link Dist (ft)	554			296	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.20	0.23	0.40	0.21
Intersection Summary					

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	83	507	100	1005	57	200	84	177	97	135	116	93
v/c Ratio	0.34	0.29	0.24	0.54	0.24	0.79	0.37	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	14.9	19.9	21.4	31.8	44.0	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	19.9	21.4	31.8	44.0	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Length 50th (ft)	14	103	40	209	36	136	55	122	52	0	80	35
Queue Length 95th (ft)	26	156	86	#307	75	#232	100	190	86	40	134	61
Internal Link Dist (ft)		598		582		972		554			296	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	336	1737	479	1854	275	289	275	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.21	0.54	0.21	0.69	0.31	0.61	0.20	0.23	0.40	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	451	65	124	843	103	89	145	49	35	172	76
Future Volume (vph)	49	451	65	124	843	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		240	118		0	128		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	0.99		0.97	1.00	1.00		1.00	0.99	
Frt			0.850			0.850		0.962			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3610	1599	1805	3610	1615	1805	1820	0	1805	1799	0
Flt Permitted	0.258			0.421			0.271			0.611		
Satd. Flow (perm)	490	3610	1558	795	3610	1559	514	1820	0	1156	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			110		15			19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1470			1974			980			578	
Travel Time (s)		28.6			38.5			22.3			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	480	69	132	897	110	95	154	52	37	183	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	480	69	132	897	110	95	206	0	37	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0	1	1	0	1	1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	36	0	20	36	0	20	36	36		36	36	
Trailing Detector (ft)	3	0	0	2	0	0	1	1		3	3	
Detector 1 Position(ft)	3	0	0	2	0	0	1	1		3	3	
Detector 1 Size(ft)	33	6	20	34	6	20	35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	5	2	2	1	6	6	7	4		3	8	

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

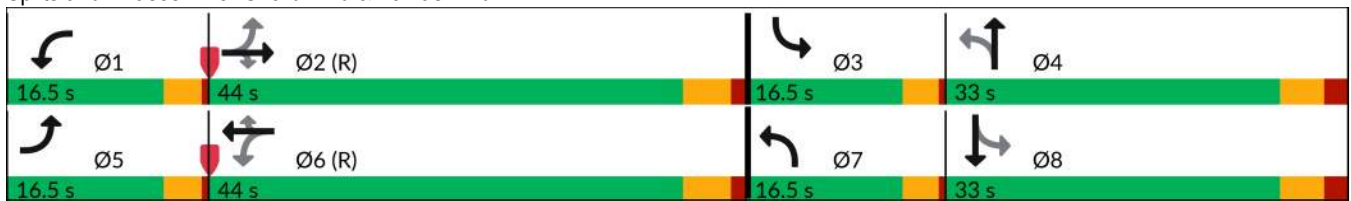
09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0	44.0	16.5	44.0	44.0	16.5	38.5		16.5	37.5	
Total Split (s)	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%	40.0%	15.0%	40.0%	40.0%	15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0	39.0	13.0	39.0	39.0	13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		18.0	18.0		17.0	17.0		26.0			25.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	63.7	56.9	56.9	68.6	60.6	60.6	33.5	25.7		27.0	19.5	
Actuated g/C Ratio	0.58	0.52	0.52	0.62	0.55	0.55	0.30	0.23		0.25	0.18	
v/c Ratio	0.15	0.26	0.08	0.23	0.45	0.12	0.37	0.47		0.12	0.79	
Control Delay (s/veh)	11.1	17.0	2.3	3.1	4.6	0.3	29.9	36.9		24.9	56.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.1	17.0	2.3	3.1	4.6	0.3	29.9	36.9		24.9	56.6	
LOS	B	B	A	A	A	A	C	D		C	E	
Approach Delay (s/veh)		14.8			4.0			34.7			52.7	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	13	94	0	10	43	0	49	121		18	168	
Queue Length 95th (ft)	36	165	16	18	53	0	77	177		37	241	
Internal Link Dist (ft)		1390			1894			900			498	
Turn Bay Length (ft)	120			120		240	118			128		
Base Capacity (vph)	463	1868	851	620	1990	908	309	478		423	464	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.11	0.26	0.08	0.21	0.45	0.12	0.31	0.43		0.09	0.57	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 120												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 17.0						Intersection LOS: B						
Intersection Capacity Utilization 64.2%						ICU Level of Service C						
Analysis Period (min) 15												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	52	480	69	132	897	110	95	206	37	264
v/c Ratio	0.15	0.26	0.08	0.23	0.45	0.12	0.37	0.47	0.12	0.79
Control Delay (s/veh)	11.1	17.0	2.3	3.1	4.6	0.3	29.9	36.9	24.9	56.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.1	17.0	2.3	3.1	4.6	0.3	29.9	36.9	24.9	56.6
Queue Length 50th (ft)	13	94	0	10	43	0	49	121	18	168
Queue Length 95th (ft)	36	165	16	18	53	0	77	177	37	241
Internal Link Dist (ft)	1390			1894			900			498
Turn Bay Length (ft)	120				120	240	118			
Base Capacity (vph)	463	1868	851	620	1990	908	309	478	423	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.26	0.08	0.21	0.45	0.12	0.31	0.43	0.09	0.57

Intersection Summary

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	610	60	100	960	5	25	5	15	15	5	30
Future Volume (vph)	5	610	60	100	960	5	25	5	15	15	5	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	90			100			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.960			0.985	
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	0	1788	1583	0	1684	0
Flt Permitted	0.273			0.405				0.825			0.887	
Satd. Flow (perm)	509	3539	1583	754	3536	0	0	1537	1583	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64		1				20		32	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		665			1326			697			671	
Travel Time (s)		13.0			25.8			15.8			15.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	5	649	64	106	1021	5	27	5	16	16	5	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	649	64	106	1026	0	0	32	16	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			20			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effct Green (s)	95.3	95.3	95.3	95.3	95.3			8.3	8.3		8.3	
Actuated g/C Ratio	0.87	0.87	0.87	0.87	0.87			0.08	0.08		0.08	
v/c Ratio	0.01	0.21	0.05	0.16	0.34			0.28	0.12		0.37	
Control Delay (s/veh)	1.4	1.4	0.3	1.2	1.0			54.1	18.3		32.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.4	1.4	0.3	1.2	1.0			54.1	18.3		32.2	
LOS	A	A	A	A	A			D	B		C	
Approach Delay (s/veh)		1.3			1.0			42.2			32.2	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)	0	26	0	4	23			22	0		14	
Queue Length 95th (ft)	m2	32	2	m9	41			53	19		54	
Internal Link Dist (ft)		585			1246			617			591	
Turn Bay Length (ft)	85		240	85								
Base Capacity (vph)	440	3064	1379	652	3062			468	496		484	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.01	0.21	0.05	0.16	0.34			0.07	0.03		0.11	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 55												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.37												
Intersection Signal Delay (s/veh): 3.0					Intersection LOS: A							
Intersection Capacity Utilization 62.1%					ICU Level of Service B							
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	5	649	64	106	1026	32	16	53
v/c Ratio	0.01	0.21	0.05	0.16	0.34	0.28	0.12	0.37
Control Delay (s/veh)	1.4	1.4	0.3	1.2	1.0	54.1	18.3	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.4	1.4	0.3	1.2	1.0	54.1	18.3	32.2
Queue Length 50th (ft)	0	26	0	4	23	22	0	14
Queue Length 95th (ft)	m2	32	2	m9	41	53	19	54
Internal Link Dist (ft)		585			1246	617		591
Turn Bay Length (ft)	85		240	85				
Base Capacity (vph)	440	3064	1379	652	3062	468	496	484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.21	0.05	0.16	0.34	0.07	0.03	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↵	↑↑	↵	↑
Traffic Volume (vph)	605	10	20	965	50	25
Future Volume (vph)	605	10	20	965	50	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.407		0.950	
Satd. Flow (perm)	3539	1583	758	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		11				27
Link Speed (mph)	35			35	30	
Link Distance (ft)	640			1388	620	
Travel Time (s)	12.5			27.0	14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	644	11	21	1027	53	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	644	11	21	1027	53	27
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (ft)	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4

Lomas Road Diet - Road Diet AM Diverted 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	44.7	44.7	44.7	44.7	8.1	8.1
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.15	0.15
v/c Ratio	0.22	0.01	0.03	0.36	0.21	0.11
Control Delay (s/veh)	2.9	1.9	3.3	3.4	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	1.9	3.3	3.4	22.9	10.0
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.9			3.4	18.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	34	0	2	63	19	0
Queue Length 95th (ft)	53	3	7	93	38	16
Internal Link Dist (ft)	560			1308	540	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	2864	1283	613	2864	776	709
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.01	0.03	0.36	0.07	0.04

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay (s/veh): 3.9	Intersection LOS: A
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	644	11	21	1027	53	27
v/c Ratio	0.22	0.01	0.03	0.36	0.21	0.11
Control Delay (s/veh)	2.9	1.9	3.3	3.4	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	1.9	3.3	3.4	22.9	10.0
Queue Length 50th (ft)	34	0	2	63	19	0
Queue Length 95th (ft)	53	3	7	93	38	16
Internal Link Dist (ft)	560			1308	540	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	2864	1283	613	2864	776	709
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.01	0.03	0.36	0.07	0.04
Intersection Summary						

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	434	63	183	819	188	95	849	107	140	916	168
Future Volume (vph)	154	434	63	183	819	188	95	849	107	140	916	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		500	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.981				0.850		0.983			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4989	0	1770	3539	1583	1770	4999	0	1770	4968	0
Flt Permitted	0.148			0.362			0.156			0.169		
Satd. Flow (perm)	276	4989	0	674	3539	1583	291	4999	0	315	4968	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				200		21			38	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		721			521			667			683	
Travel Time (s)		14.0			8.9			11.4			11.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	164	462	67	195	871	200	101	903	114	149	974	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	529	0	195	871	200	101	1017	0	149	1153	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		20			20			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	13.2	28.6		24.2	39.6	39.6	11.0	38.5		18.7	46.2	
Total Split (%)	12.0%	26.0%		22.0%	36.0%	36.0%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	9.7	23.1		20.7	34.1	34.1	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	43.2	32.2		47.8	34.8	34.8	47.7	39.0		52.4	41.5	
Actuated g/C Ratio	0.39	0.29		0.43	0.32	0.32	0.43	0.35		0.48	0.38	
v/c Ratio	0.71	0.36		0.48	0.78	0.31	0.47	0.57		0.55	0.61	
Control Delay (s/veh)	38.2	31.2		13.7	31.2	5.9	23.1	30.0		23.8	28.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	38.2	31.2		13.7	31.2	5.9	23.1	30.0		23.8	28.5	
LOS	D	C		B	C	A	C	C		C	C	
Approach Delay (s/veh)		32.9			24.5			29.4			27.9	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	78	109		71	303	46	37	206		57	232	
Queue Length 95th (ft)	#155	153		39	379	56	68	265		96	282	
Internal Link Dist (ft)		641			441			587			603	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	241	1476		508	1121	637	228	1785		354	1898	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.68	0.36		0.38	0.78	0.31	0.44	0.57		0.42	0.61	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 95												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.78												
Intersection Signal Delay (s/veh): 28.1						Intersection LOS: C						
Intersection Capacity Utilization 73.7%						ICU Level of Service D						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												

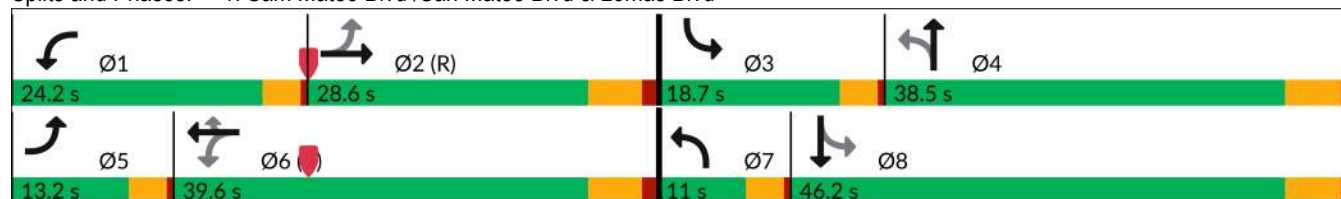
Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Queue shown is maximum after two cycles.

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	529	195	871	200	101	1017	149	1153
v/c Ratio	0.71	0.36	0.48	0.78	0.31	0.47	0.57	0.55	0.61
Control Delay (s/veh)	38.2	31.2	13.7	31.2	5.9	23.1	30.0	23.8	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.2	31.2	13.7	31.2	5.9	23.1	30.0	23.8	28.5
Queue Length 50th (ft)	78	109	71	303	46	37	206	57	232
Queue Length 95th (ft)	#155	153	39	379	56	68	265	96	282
Internal Link Dist (ft)		641		441			587		603
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	241	1476	508	1121	637	228	1785	354	1898
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.36	0.38	0.78	0.31	0.44	0.57	0.42	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	555	46	137	1075	45	66	192	102	68	226	71
Future Volume (vph)	80	555	46	137	1075	45	66	192	102	68	226	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.964	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3412	0
Flt Permitted	0.196			0.389			0.363			0.567		
Satd. Flow (perm)	365	3539	1583	725	3539	1583	676	3539	1583	1056	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			109		37	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2083			2568			471			663	
Travel Time (s)		35.5			43.8			9.2			12.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	590	49	146	1144	48	70	204	109	72	240	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	590	49	146	1144	48	70	204	109	72	316	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		20			20			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	73.8	66.5	0.0	77.1	69.4	0.0	21.5	13.4	13.4	21.7	13.5	
Actuated g/C Ratio	0.67	0.60	0.00	0.70	0.63	0.00	0.20	0.12	0.12	0.20	0.12	
v/c Ratio	0.27	0.28	0.35	0.25	0.51	0.35	0.34	0.47	0.38	0.28	0.70	
Control Delay (s/veh)	8.1	6.9	14.3	7.3	14.1	6.7	36.3	48.1	11.9	34.6	49.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.1	6.9	14.3	7.3	14.1	6.7	36.3	48.1	11.9	34.6	49.1	
LOS	A	A	B	A	B	A	D	D	B	C	D	
Approach Delay (s/veh)		7.5			13.1			35.6			46.4	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	9	40	11	30	232	0	40	71	0	41	101	
Queue Length 95th (ft)	m22	59	m55	64	358	0	71	104	49	73	143	
Internal Link Dist (ft)		2003			2488			391			583	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	380	2140	139	641	2232	139	280	971	513	295	896	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.22	0.28	0.35	0.23	0.51	0.35	0.25	0.21	0.21	0.24	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 19.3

Intersection LOS: B

Intersection Capacity Utilization 61.3%

ICU Level of Service B

Analysis Period (min) 15

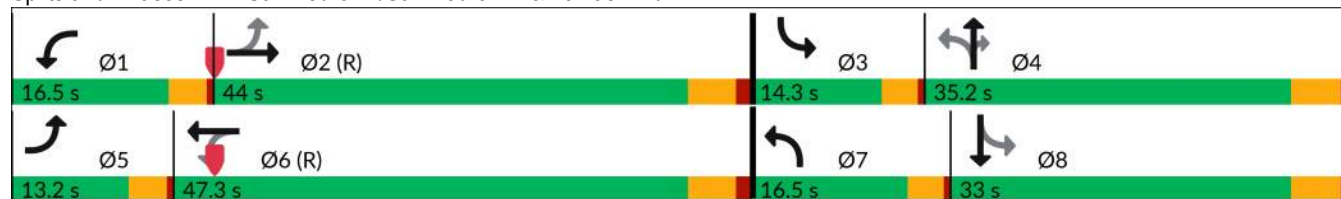
m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	85	590	49	146	1144	48	70	204	109	72	316
v/c Ratio	0.27	0.28	0.35	0.25	0.51	0.35	0.34	0.47	0.38	0.28	0.70
Control Delay (s/veh)	8.1	6.9	14.3	7.3	14.1	6.7	36.3	48.1	11.9	34.6	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.1	6.9	14.3	7.3	14.1	6.7	36.3	48.1	11.9	34.6	49.1
Queue Length 50th (ft)	9	40	11	30	232	0	40	71	0	41	101
Queue Length 95th (ft)	m22	59	m55	64	358	0	71	104	49	73	143
Internal Link Dist (ft)	2003			2488			391			583	
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	380	2140	139	641	2232	139	280	971	513	295	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.28	0.35	0.23	0.51	0.35	0.25	0.21	0.21	0.24	0.35
Intersection Summary											
m Volume for 95th percentile queue is metered by upstream signal.											

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Future Volume (vph)	1	61	515	39	44	831	53	68	124	56	48	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.97	1.00	1.00					1.00	0.99
Frt				0.850		0.991			0.953			0.945
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3572	0	1805	1811	0	1805	1784
Flt Permitted		0.288			0.447			0.450			0.368	
Satd. Flow (perm)	0	546	3610	1574	847	3572	0	855	1811	0	699	1784
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				41		11			21			27
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			665			586			367
Travel Time (s)			27.0			13.0			13.3			8.3
Confl. Peds. (#/hr)	2	2		2	3		3				1	
Confl. Bikes (#/hr)				2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	65	548	41	47	884	56	72	132	60	51	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	548	41	47	940	0	72	192	0	51	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			20			20			20			20
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		37	37		36	36
Trailing Detector (ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.94
Heavy Vehicles (%)	0%
Adj. Flow (vph)	61
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		85.0	85.0	85.0	85.0	85.0		15.0	15.0		15.0	15.0
Actuated g/C Ratio		0.77	0.77	0.77	0.77	0.77		0.14	0.14		0.14	0.14
v/c Ratio		0.16	0.20	0.03	0.07	0.34		0.62	0.73		0.54	0.62
Control Delay (s/veh)		5.1	3.9	1.4	2.4	2.5		66.4	55.6		63.4	47.0
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.1	3.9	1.4	2.4	2.5		66.4	55.6		63.4	47.0
LOS		A	A	A	A	A		E	E		E	D
Approach Delay (s/veh)			3.9			2.5			58.6			50.8
Approach LOS			A			A			E			D
Queue Length 50th (ft)		10	44	0	4	47		49	117		34	94
Queue Length 95th (ft)		29	78	9	10	54		94	183		72	154
Internal Link Dist (ft)			1308			585			506			287
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		421	2790	1225	654	2763		260	566		212	562
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.20	0.03	0.07	0.34		0.28	0.34		0.24	0.30

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 14.8
Intersection Capacity Utilization 71.3%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service C

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

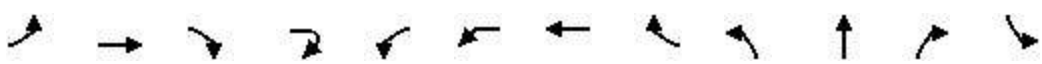
09/03/2025

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	548	41	47	940	72	192	51	166
v/c Ratio	0.16	0.20	0.03	0.07	0.34	0.62	0.73	0.54	0.62
Control Delay (s/veh)	5.1	3.9	1.4	2.4	2.5	66.4	55.6	63.4	47.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.1	3.9	1.4	2.4	2.5	66.4	55.6	63.4	47.0
Queue Length 50th (ft)	10	44	0	4	47	49	117	34	94
Queue Length 95th (ft)	29	78	9	10	54	94	183	72	154
Internal Link Dist (ft)	1308				585		506		287
Turn Bay Length (ft)	113	240		145	120			90	
Base Capacity (vph)	421	2790	1225	654	2763	260	566	212	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.20	0.03	0.07	0.34	0.28	0.34	0.24	0.30
Intersection Summary									

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Future Volume (vph)	78	415	13	4	20	74	810	89	39	177	11	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240			100		240	112		0	130
Storage Lanes	1		0			1		0	1		0	1
Taper Length (ft)	25					25			25			25
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor						1.00	1.00		1.00	1.00		1.00
Frt		0.994					0.985			0.991		
Flt Protected	0.950					0.950			0.950			0.950
Satd. Flow (prot)	1805	5156	0	0	0	1805	5095	0	1805	1881	0	1805
Flt Permitted	0.208					0.441			0.950			0.950
Satd. Flow (perm)	395	5156	0	0	0	834	5095	0	1800	1881	0	1802
Right Turn on Red			Yes					Yes			Yes	
Satd. Flow (RTOR)		1					15			2		
Link Speed (mph)		35					35			30		
Link Distance (ft)		688					654			1052		
Travel Time (s)		13.4					12.7			23.9		
Confl. Peds. (#/hr)					2	2		2	1		1	1
Confl. Bikes (#/hr)								2			1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	83	441	14	4	21	79	862	95	41	188	12	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	459	0	0	0	100	957	0	41	200	0	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)		12					12			12		
Link Offset(ft)		0					0			0		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15		9	15
Number of Detectors	1	1			1	1	1		1	1		1
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	36	100			20	20	100		20	25		35
Trailing Detector (ft)	1	0			10	0	0		15	35		10
Detector 1 Position(ft)	1	0			10	0	0		15	35		10
Detector 1 Size(ft)	35	100			10	20	100		5	-10		25
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Split	NA		Split
Protected Phases	5	2			1	1	6		8	8		4
Permitted Phases	2				6	6						
Detector Phase	5	2			1	1	6		8	8		4

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report

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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

					
Lane Group	SBT	SBR	SBR2	NEL	NER
Lane Configurations					
Traffic Volume (vph)	166	91	127	109	87
Future Volume (vph)	166	91	127	109	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)		115		0	170
Storage Lanes		2		1	2
Taper Length (ft)				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.88
Ped Bike Factor					
Frt		0.850	0.850		0.850
Flt Protected				0.950	
Satd. Flow (prot)	1900	1615	1615	1805	2842
Flt Permitted				0.950	
Satd. Flow (perm)	1900	1615	1615	1805	2842
Right Turn on Red			Yes		
Satd. Flow (RTOR)			135		
Link Speed (mph)	30			35	
Link Distance (ft)	634			376	
Travel Time (s)	14.4			7.3	
Confl. Peds. (#/hr)		1	1		
Confl. Bikes (#/hr)			3		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Adj. Flow (vph)	177	97	135	116	93
Shared Lane Traffic (%)					
Lane Group Flow (vph)	177	97	135	116	93
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right
Median Width(ft)	12			12	
Link Offset(ft)	0			0	
Crosswalk Width(ft)	16			16	
Two way Left Turn Lane					
Headway Factor	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15	9
Number of Detectors	1	1	1	1	1
Detector Template	Thru	Right	Right	Left	Right
Leading Detector (ft)	40	40	40	20	20
Trailing Detector (ft)	10	10	10	0	0
Detector 1 Position(ft)	10	10	10	0	0
Detector 1 Size(ft)	30	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	pt+ov	custom	Prot	Prot
Protected Phases	4	3 4	3 4	3	3
Permitted Phases					
Detector Phase	4	3 4	3 4	3	3

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

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Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0		8.0
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5		24.0
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0		22.0
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%		20.0%
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5		16.5
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5		3.5
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	3.5	6.0				3.5	5.5		5.5	5.5		5.5
Lead/Lag	Lead	Lag			Lead	Lead	Lag					Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					Yes
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0		2.0
Recall Mode	None	C-Max			None	None	Max		None	None		None
Walk Time (s)		7.0					7.0		7.0	7.0		0.0
Flash Don't Walk (s)		18.0					21.0		25.0	25.0		0.0
Pedestrian Calls (#/hr)		0					0		0	0		0
Act Effct Green (s)	46.7	37.1				48.6	39.8		14.7	14.7		14.0
Actuated g/C Ratio	0.42	0.34				0.44	0.36		0.13	0.13		0.13
v/c Ratio	0.32	0.26				0.23	0.52		0.17	0.79		0.37
Control Delay (s/veh)	14.7	20.3				21.3	31.2		42.7	67.8		47.4
Queue Delay	0.0	0.0				0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	14.7	20.3				21.3	31.2		42.7	67.8		47.4
LOS	B	C				C	C		D	E		D
Approach Delay (s/veh)		19.5					30.3			63.5		
Approach LOS		B					C			E		
Queue Length 50th (ft)	15	93				40	196		26	136		55
Queue Length 95th (ft)	28	143				86	286		58	#232		100
Internal Link Dist (ft)		608					574			972		
Turn Bay Length (ft)	95					100			112			130
Base Capacity (vph)	347	1739				498	1853		275	289		275
Starvation Cap Reductn	0	0				0	0		0	0		0
Spillback Cap Reductn	0	0				0	0		0	0		0
Storage Cap Reductn	0	0				0	0		0	0		0
Reduced v/c Ratio	0.24	0.26				0.20	0.52		0.15	0.69		0.31

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 34.7

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBT	SBR	SBR2	NEL	NER
Switch Phase					
Minimum Initial (s)	8.0			8.0	8.0
Minimum Split (s)	24.0			22.0	22.0
Total Split (s)	22.0			22.0	22.0
Total Split (%)	20.0%			20.0%	20.0%
Maximum Green (s)	16.5			17.5	17.5
Yellow Time (s)	3.5			3.5	3.5
All-Red Time (s)	2.0			1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0
Total Lost Time (s)	5.5			4.5	4.5
Lead/Lag	Lag			Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes
Vehicle Extension (s)	2.0			2.0	2.0
Recall Mode	None			None	None
Walk Time (s)	0.0				
Flash Don't Walk (s)	0.0				
Pedestrian Calls (#/hr)	0				
Act Effect Green (s)	14.0	31.0	31.0	11.5	11.5
Actuated g/C Ratio	0.13	0.28	0.28	0.10	0.10
v/c Ratio	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.7	29.4	5.4	60.6	47.3
LOS	E	C	A	E	D
Approach Delay (s/veh)	38.2			54.7	
Approach LOS	D			D	
Queue Length 50th (ft)	122	52	0	80	35
Queue Length 95th (ft)	190	86	40	134	61
Internal Link Dist (ft)	554			296	
Turn Bay Length (ft)		115	115		170
Base Capacity (vph)	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.20	0.23	0.40	0.21
Intersection Summary					

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	83	459	100	957	41	200	84	177	97	135	116	93
v/c Ratio	0.32	0.26	0.23	0.52	0.17	0.79	0.37	0.73	0.21	0.24	0.61	0.31
Control Delay (s/veh)	14.7	20.3	21.3	31.2	42.7	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.7	20.3	21.3	31.2	42.7	67.8	47.4	63.7	29.4	5.4	60.6	47.3
Queue Length 50th (ft)	15	93	40	196	26	136	55	122	52	0	80	35
Queue Length 95th (ft)	28	143	86	286	58	#232	100	190	86	40	134	61
Internal Link Dist (ft)		608		574		972		554			296	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	347	1739	498	1853	275	289	275	290	487	582	287	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.26	0.20	0.52	0.15	0.69	0.31	0.61	0.20	0.23	0.40	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Future Volume (vph)	49	406	65	124	783	103	89	145	49	35	172	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		240	118		0	128		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	0.99		0.97	1.00	1.00		1.00	0.99	
Frt			0.850			0.850		0.962			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3610	1599	1805	3610	1615	1805	1820	0	1805	1799	0
Flt Permitted	0.286			0.450			0.271			0.611		
Satd. Flow (perm)	543	3610	1558	849	3610	1559	514	1820	0	1156	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			110		15			19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1470			1964			980			578	
Travel Time (s)		28.6			38.3			22.3			13.1	
Confl. Peds. (#/hr)	2		2	6		6	3		3	6		6
Confl. Bikes (#/hr)			1			1			3			7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	52	432	69	132	833	110	95	154	52	37	183	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	432	69	132	833	110	95	206	0	37	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0	1	1	0	1	1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	36	0	20	36	0	20	36	36		36	36	
Trailing Detector (ft)	3	0	0	2	0	0	1	1		3	3	
Detector 1 Position(ft)	3	0	0	2	0	0	1	1		3	3	
Detector 1 Size(ft)	33	6	20	34	6	20	35	35		33	33	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	5	2	2	1	6	6	7	4		3	8	

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Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

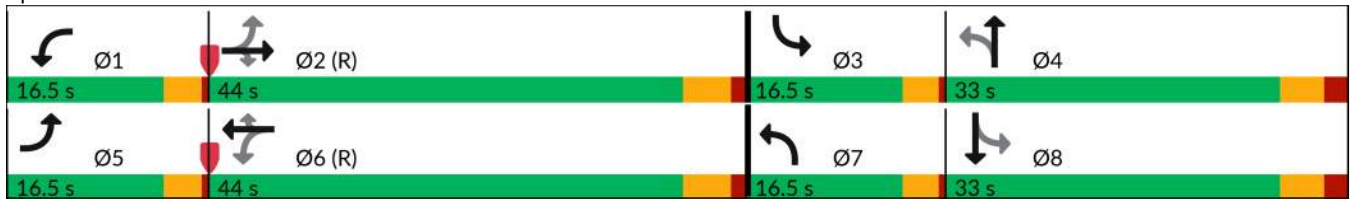
09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	8.0	
Minimum Split (s)	16.5	44.0	44.0	16.5	44.0	44.0	16.5	38.5		16.5	37.5	
Total Split (s)	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0	
Total Split (%)	15.0%	40.0%	40.0%	15.0%	40.0%	40.0%	15.0%	30.0%		15.0%	30.0%	
Maximum Green (s)	13.0	39.0	39.0	13.0	39.0	39.0	13.0	27.5		13.0	27.5	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	2.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		18.0	18.0		17.0	17.0		26.0			25.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	63.7	56.9	56.9	68.6	60.6	60.6	33.5	25.7		27.0	19.5	
Actuated g/C Ratio	0.58	0.52	0.52	0.62	0.55	0.55	0.30	0.23		0.25	0.18	
v/c Ratio	0.14	0.23	0.08	0.22	0.42	0.12	0.37	0.47		0.12	0.79	
Control Delay (s/veh)	11.0	16.8	2.3	2.8	3.9	0.3	29.9	36.9		24.9	56.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.0	16.8	2.3	2.8	3.9	0.3	29.9	36.9		24.9	56.6	
LOS	B	B	A	A	A	A	C	D		C	E	
Approach Delay (s/veh)		14.4			3.4			34.7			52.7	
Approach LOS		B			A			C			D	
Queue Length 50th (ft)	13	83	0	10	37	0	49	121		18	168	
Queue Length 95th (ft)	36	148	16	16	47	0	77	177		37	241	
Internal Link Dist (ft)		1390			1884			900			498	
Turn Bay Length (ft)	120			120		240	118			128		
Base Capacity (vph)	490	1868	851	648	1990	908	309	478		423	464	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.11	0.23	0.08	0.20	0.42	0.12	0.31	0.43		0.09	0.57	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 120												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 17.0						Intersection LOS: B						
Intersection Capacity Utilization 64.2%						ICU Level of Service C						
Analysis Period (min) 15												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

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Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	52	432	69	132	833	110	95	206	37	264
v/c Ratio	0.14	0.23	0.08	0.22	0.42	0.12	0.37	0.47	0.12	0.79
Control Delay (s/veh)	11.0	16.8	2.3	2.8	3.9	0.3	29.9	36.9	24.9	56.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.0	16.8	2.3	2.8	3.9	0.3	29.9	36.9	24.9	56.6
Queue Length 50th (ft)	13	83	0	10	37	0	49	121	18	168
Queue Length 95th (ft)	36	148	16	16	47	0	77	177	37	241
Internal Link Dist (ft)	1390			1884			900			498
Turn Bay Length (ft)	120			120		240	118		128	
Base Capacity (vph)	490	1868	851	648	1990	908	309	478	423	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.23	0.08	0.20	0.42	0.12	0.31	0.43	0.09	0.57
Intersection Summary										

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	575	60	100	925	5	25	5	15	15	5	30
Future Volume (vph)	5	575	60	100	925	5	25	5	15	15	5	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	90			100			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.960			0.985	
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	0	1788	1583	0	1684	0
Flt Permitted	0.284			0.420				0.825			0.887	
Satd. Flow (perm)	529	3539	1583	782	3536	0	0	1537	1583	0	1517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64		1				20		32	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		665			1322			697			671	
Travel Time (s)		13.0			25.8			15.8			15.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	5	612	64	106	984	5	27	5	16	16	5	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	612	64	106	989	0	0	32	16	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			20			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effect Green (s)	95.3	95.3	95.3	95.3	95.3			8.3	8.3		8.3	
Actuated g/C Ratio	0.87	0.87	0.87	0.87	0.87			0.08	0.08		0.08	
v/c Ratio	0.01	0.20	0.05	0.16	0.32			0.28	0.12		0.37	
Control Delay (s/veh)	1.4	1.3	0.3	1.2	0.9			54.1	18.3		32.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.4	1.3	0.3	1.2	0.9			54.1	18.3		32.2	
LOS	A	A	A	A	A			D	B		C	
Approach Delay (s/veh)		1.2			1.0			42.2			32.2	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)	0	24	0	4	21			22	0		14	
Queue Length 95th (ft)	m2	31	2	m9	36			53	19		54	
Internal Link Dist (ft)		585			1242			617			591	
Turn Bay Length (ft)	85		240	85								
Base Capacity (vph)	458	3064	1379	677	3062			468	496		484	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.01	0.20	0.05	0.16	0.32			0.07	0.03		0.11	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay (s/veh): 3.0

Intersection LOS: A

Intersection Capacity Utilization 61.2%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	5	612	64	106	989	32	16	53
v/c Ratio	0.01	0.20	0.05	0.16	0.32	0.28	0.12	0.37
Control Delay (s/veh)	1.4	1.3	0.3	1.2	0.9	54.1	18.3	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.4	1.3	0.3	1.2	0.9	54.1	18.3	32.2
Queue Length 50th (ft)	0	24	0	4	21	22	0	14
Queue Length 95th (ft)	m2	31	2	m9	36	53	19	54
Internal Link Dist (ft)		585			1242	617		591
Turn Bay Length (ft)	85		240	85				
Base Capacity (vph)	458	3064	1379	677	3062	468	496	484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.20	0.05	0.16	0.32	0.07	0.03	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	565	10	20	920	50	25
Future Volume (vph)	565	10	20	920	50	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.425		0.950	
Satd. Flow (perm)	3539	1583	792	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		11				27
Link Speed (mph)	35			35	30	
Link Distance (ft)	648			1388	620	
Travel Time (s)	12.6			27.0	14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	601	11	21	979	53	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	601	11	21	979	53	27
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (ft)	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4

Lomas Road Diet - Road Diet AM 7:30 am 05/20/2024 Baseline

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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	44.7	44.7	44.7	44.7	8.1	8.1
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.15	0.15
v/c Ratio	0.21	0.01	0.03	0.34	0.21	0.11
Control Delay (s/veh)	2.8	1.9	3.3	3.3	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.8	1.9	3.3	3.3	22.9	10.0
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.8			3.3	18.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	31	0	2	59	19	0
Queue Length 95th (ft)	49	3	7	87	38	16
Internal Link Dist (ft)	568			1308	540	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	2864	1283	641	2864	776	709
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.01	0.03	0.34	0.07	0.04

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay (s/veh): 3.9	Intersection LOS: A
Intersection Capacity Utilization 40.4%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	601	11	21	979	53	27
v/c Ratio	0.21	0.01	0.03	0.34	0.21	0.11
Control Delay (s/veh)	2.8	1.9	3.3	3.3	22.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.8	1.9	3.3	3.3	22.9	10.0
Queue Length 50th (ft)	31	0	2	59	19	0
Queue Length 95th (ft)	49	3	7	87	38	16
Internal Link Dist (ft)	568			1308	540	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	2864	1283	641	2864	776	709
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.01	0.03	0.34	0.07	0.04
Intersection Summary						

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	700	149	173	583	164	151	872	166	185	851	183
Future Volume (vph)	245	700	149	173	583	164	151	872	166	185	851	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		240	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	1.00	1.00		1.00		0.98	1.00	1.00		1.00	1.00	
Frt		0.974				0.850		0.976			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4941	0	1770	3539	1583	1770	4948	0	1770	4935	0
Flt Permitted	0.275			0.229			0.165			0.147		
Satd. Flow (perm)	511	4941	0	426	3539	1557	307	4948	0	273	4935	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				167		36			43	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		697			547			672			669	
Travel Time (s)		13.6			9.3			11.5			11.4	
Confl. Peds. (#/hr)	5		2	2		5	3		8	8		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	250	714	152	177	595	167	154	890	169	189	868	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	866	0	177	595	167	154	1059	0	189	1055	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2		2	8			4		
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	38.5		9.5	39.5	39.5	9.5	39.5		9.5	36.5	
Total Split (s)	16.5	37.4		16.5	37.4	37.4	18.7	37.4		18.7	37.4	
Total Split (%)	15.0%	34.0%		15.0%	34.0%	34.0%	17.0%	34.0%		17.0%	34.0%	
Maximum Green (s)	13.0	31.9		13.0	31.9	31.9	15.2	31.9		15.2	31.9	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			27.0	27.0		27.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	48.5	34.6		45.3	33.0	33.0	47.9	36.1		50.3	37.3	
Actuated g/C Ratio	0.44	0.31		0.41	0.30	0.30	0.44	0.33		0.46	0.34	
v/c Ratio	0.69	0.55		0.59	0.56	0.29	0.59	0.64		0.69	0.62	
Control Delay (s/veh)	34.4	36.1		23.3	35.8	8.1	26.2	33.0		31.7	31.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	34.4	36.1		23.3	35.8	8.1	26.2	33.0		31.7	31.5	
LOS	C	D		C	D	A	C	C		C	C	
Approach Delay (s/veh)		35.7			28.5			32.1			31.5	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	132	197		92	211	29	60	223		76	216	
Queue Length 95th (ft)	192	242		54	275	82	101	290		132	284	
Internal Link Dist (ft)		617			467			592			589	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	375	1581		344	1061	584	346	1647		336	1703	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.67	0.55		0.51	0.56	0.29	0.45	0.64		0.56	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 58 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 32.1

Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Analysis Period (min) 15

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	866	177	595	167	154	1059	189	1055
v/c Ratio	0.69	0.55	0.59	0.56	0.29	0.59	0.64	0.69	0.62
Control Delay (s/veh)	34.4	36.1	23.3	35.8	8.1	26.2	33.0	31.7	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.4	36.1	23.3	35.8	8.1	26.2	33.0	31.7	31.5
Queue Length 50th (ft)	132	197	92	211	29	60	223	76	216
Queue Length 95th (ft)	192	242	54	275	82	101	290	132	284
Internal Link Dist (ft)		617		467			592		589
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	375	1581	344	1061	584	346	1647	336	1703
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.55	0.51	0.56	0.29	0.45	0.64	0.56	0.62
Intersection Summary									

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	747	93	101	663	83	127	263	141	134	287	146
Future Volume (vph)	158	747	93	101	663	83	127	263	141	134	287	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00			1.00			1.00		0.99	1.00	0.99	
Frt			0.850			0.850			0.850		0.949	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3341	0
Flt Permitted	0.328			0.311			0.255			0.485		
Satd. Flow (perm)	611	3539	1583	577	3539	1583	474	3539	1561	902	3341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			144			78
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2063			2606			477			652	
Travel Time (s)		35.2			44.4			9.3			12.7	
Confl. Peds. (#/hr)	1		11	11		1	3		2	2		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	161	762	95	103	677	85	130	268	144	137	293	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	762	95	103	677	85	130	268	144	137	442	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 5

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0	33.0	16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%	30.0%	15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	28.0	28.0	13.0	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	3.0	3.0	1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	68.4	58.6	0.0	65.0	56.9	0.0	29.1	17.5	17.5	29.5	17.7	
Actuated g/C Ratio	0.62	0.53	0.00	0.59	0.52	0.00	0.26	0.16	0.16	0.27	0.16	
v/c Ratio	0.34	0.40	0.68	0.25	0.37	0.61	0.53	0.48	0.39	0.42	0.73	
Control Delay (s/veh)	8.3	10.3	39.7	10.8	18.2	20.4	36.0	44.2	9.4	32.0	43.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.3	10.3	39.7	10.8	18.2	20.4	36.0	44.2	9.4	32.0	43.1	
LOS	A	B	D	B	B	C	D	D	A	C	D	
Approach Delay (s/veh)		12.8			17.5			33.0			40.5	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)	27	73	39	26	143	0	69	92	0	73	130	
Queue Length 95th (ft)	m44	162	m#116	59	236	#24	105	125	52	110	175	
Internal Link Dist (ft)		1983			2526			397			572	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	526	1884	139	506	1830	139	288	900	504	360	908	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.31	0.40	0.68	0.20	0.37	0.61	0.45	0.30	0.29	0.38	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 23.1

Intersection LOS: C

Intersection Capacity Utilization 63.8%

ICU Level of Service B

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

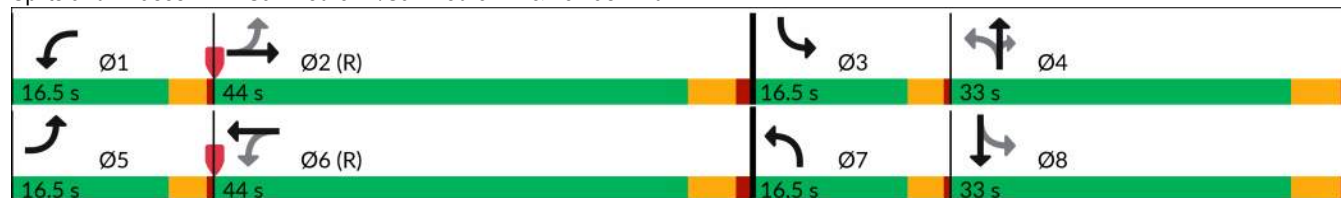
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	762	95	103	677	85	130	268	144	137	442
v/c Ratio	0.34	0.40	0.68	0.25	0.37	0.61	0.53	0.48	0.39	0.42	0.73
Control Delay (s/veh)	8.3	10.3	39.7	10.8	18.2	20.4	36.0	44.2	9.4	32.0	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.3	10.3	39.7	10.8	18.2	20.4	36.0	44.2	9.4	32.0	43.1
Queue Length 50th (ft)	27	73	39	26	143	0	69	92	0	73	130
Queue Length 95th (ft)	m44	162	m#116	59	236	#24	105	125	52	110	175
Internal Link Dist (ft)		1983			2526			397			572
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	526	1884	139	506	1830	139	288	900	504	360	908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.40	0.68	0.20	0.37	0.61	0.45	0.30	0.29	0.38	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	815	60	52	721	52	47	132	62	59	158
Future Volume (vph)	3	67	815	60	52	721	52	47	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt				0.850		0.990			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3569	0	1805	1800	0	1805	1819
Flt Permitted		0.341			0.324			0.335			0.384	
Satd. Flow (perm)	0	648	3610	1615	615	3569	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				61		12			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			663			1574			392
Travel Time (s)			27.0			12.9			35.8			8.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	832	61	53	736	53	48	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	832	61	53	789	0	48	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		37	37		36	36
Trailing Detector (ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		83.4	83.4	83.4	83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76	0.76	0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.30	0.05	0.11	0.29		0.51	0.68		0.55	0.75
Control Delay (s/veh)		5.4	5.0	1.4	3.2	2.8		59.4	50.5		60.3	56.5
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.4	5.0	1.4	3.2	2.8		59.4	50.5		60.3	56.5
LOS		A	A	A	A	A		E	D		E	E
Approach Delay (s/veh)			4.8			2.8			52.2			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	81	0	5	42		32	119		40	136
Queue Length 95th (ft)		32	136	12	12	52		68	183		81	204
Internal Link Dist (ft)			1308			583			1494			312
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		491	2735	1238	466	2707		193	563		221	565
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.30	0.05	0.11	0.29		0.25	0.35		0.27	0.38

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings

6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 15.3

Intersection LOS: B

Intersection Capacity Utilization 71.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	832	61	53	789	48	198	60	215
v/c Ratio	0.14	0.30	0.05	0.11	0.29	0.51	0.68	0.55	0.75
Control Delay (s/veh)	5.4	5.0	1.4	3.2	2.8	59.4	50.5	60.3	56.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.4	5.0	1.4	3.2	2.8	59.4	50.5	60.3	56.5
Queue Length 50th (ft)	11	81	0	5	42	32	119	40	136
Queue Length 95th (ft)	32	136	12	12	52	68	183	81	204
Internal Link Dist (ft)		1308			583		1494		312
Turn Bay Length (ft)	113		240	145		120		90	
Base Capacity (vph)	491	2735	1238	466	2707	193	563	221	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.30	0.05	0.11	0.29	0.25	0.35	0.27	0.38
Intersection Summary									

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	644	48	2	31	79	603	96	1	46	217	41
Future Volume (vph)	117	644	48	2	31	79	603	96	1	46	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240			100		240		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				1.00	1.00			0.98	1.00	
Frt		0.989					0.979				0.976	
Flt Protected	0.950					0.950				0.950		
Satd. Flow (prot)	1805	5122	0	0	0	1805	5060	0	0	1737	1850	0
Flt Permitted	0.275					0.289				0.631		
Satd. Flow (perm)	522	5122	0	0	0	547	5060	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							25				7	
Link Speed (mph)		35					35				30	
Link Distance (ft)		688					652				1176	
Travel Time (s)		13.4					12.7				26.7	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	657	49	2	32	81	615	98	1	47	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	708	0	0	0	113	713	0	0	48	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Perm	Split	NA	
Protected Phases	5	2			1	1	6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	1	6		8	8	8	

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	0.99				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1787	1900	1615	1615	1800	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				119		174	
Link Speed (mph)		30			35		
Link Distance (ft)		634			350		
Travel Time (s)		14.4			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	pt+ov	custom	Prot	Prot	
Protected Phases	4	4	3 4	3 4	3	3	
Permitted Phases							
Detector Phase	4	4	3 4	3 4	3	3	

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0	22.0	
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%	20.0%	
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5	16.5	
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0				0.0	0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0				3.5	5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	None	Max		None	None	None	
Walk Time (s)		7.0					7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0					21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0					0		0	0	0	
Act Effct Green (s)	42.7	31.4				42.2	31.7			18.3	18.3	
Actuated g/C Ratio	0.39	0.29				0.38	0.29			0.17	0.17	
v/c Ratio	0.39	0.48				0.37	0.48			0.26	0.84	
Control Delay (s/veh)	15.7	26.2				25.7	34.4			44.0	67.2	
Queue Delay	0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay (s/veh)	15.7	26.2				25.7	34.4			44.0	67.2	
LOS	B	C				C	C			D	E	
Approach Delay (s/veh)		24.7					33.2				63.7	
Approach LOS		C					C				E	
Queue Length 50th (ft)	48	165				52	154			29	171	
Queue Length 95th (ft)	31	219				95	210			68	#340	
Internal Link Dist (ft)		608					572				1096	
Turn Bay Length (ft)	95					100				112		
Base Capacity (vph)	366	1463				373	1475			190	316	
Starvation Cap Reductn	0	0				0	0			0	0	
Spillback Cap Reductn	0	0				0	0			0	0	
Storage Cap Reductn	0	0				0	0			0	0	
Reduced v/c Ratio	0.33	0.48				0.30	0.48			0.25	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 135												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.84												
Intersection Signal Delay (s/veh): 35.8					Intersection LOS: D							
Intersection Capacity Utilization 79.9%					ICU Level of Service D							
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0			8.0	8.0	
Minimum Split (s)	24.0	24.0			22.0	22.0	
Total Split (s)	22.0	22.0			22.0	22.0	
Total Split (%)	20.0%	20.0%			20.0%	20.0%	
Maximum Green (s)	16.5	16.5			17.5	17.5	
Yellow Time (s)	3.5	3.5			3.5	3.5	
All-Red Time (s)	2.0	2.0			1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.5	5.5			4.5	4.5	
Lead/Lag	Lag	Lag			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	
Recall Mode	None	None			None	None	
Walk Time (s)	0.0	0.0					
Flash Don't Walk (s)	0.0	0.0					
Pedestrian Calls (#/hr)	0	0					
Act Effect Green (s)	15.3	15.3	32.3	32.3	11.5	11.5	
Actuated g/C Ratio	0.14	0.14	0.29	0.29	0.10	0.10	
v/c Ratio	0.52	0.77	0.21	0.20	0.61	0.24	
Control Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
LOS	D	E	C	A	E	A	
Approach Delay (s/veh)		42.3			32.4		
Approach LOS		D			C		
Queue Length 50th (ft)	85	138	52	0	80	0	
Queue Length 95th (ft)	143	214	86	34	134	3	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	282	297	493	576	287	598	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.68	0.20	0.19	0.40	0.18	
Intersection Summary							

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	119	708	113	713	48	263	129	202	98	112	116	107
v/c Ratio	0.39	0.48	0.37	0.48	0.26	0.84	0.52	0.77	0.21	0.20	0.61	0.24
Control Delay (s/veh)	15.7	26.2	25.7	34.4	44.0	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.7	26.2	25.7	34.4	44.0	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Length 50th (ft)	48	165	52	154	29	171	85	138	52	0	80	0
Queue Length 95th (ft)	31	219	95	210	68	#340	143	214	86	34	134	3
Internal Link Dist (ft)		608		572		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	366	1463	373	1475	190	316	282	297	493	576	287	598
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.48	0.30	0.48	0.25	0.83	0.46	0.68	0.20	0.19	0.40	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	701	101	89	600	52	71	149	77	48	184
Future Volume (vph)	2	52	701	101	89	600	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		240	118		0	128	
Storage Lanes		1		1	1		1	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00		0.97	1.00	0.99		1.00	1.00
Frt				0.850			0.850		0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3610	1615	1805	1792	0	1805	1807
Flt Permitted		0.389			0.326			0.272			0.407	
Satd. Flow (perm)	0	732	3610	1562	619	3610	1572	516	1792	0	772	1807
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				103			94		23			18
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1512			1964			1015			578
Travel Time (s)			29.5			38.3			23.1			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	715	103	91	612	53	72	152	79	49	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	715	103	91	612	53	72	231	0	49	267
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0	1	1	0	1	1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0	20	36	0	20	36	36		36	36
Trailing Detector (ft)	0	3	0	0	2	0	0	1	1		3	3
Detector 1 Position(ft)	0	3	0	0	2	0	0	1	1		3	3
Detector 1 Size(ft)	20	33	6	20	34	6	20	35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4			8	
Detector Phase	5	5	2	2	1	6	6	7	4		3	8

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

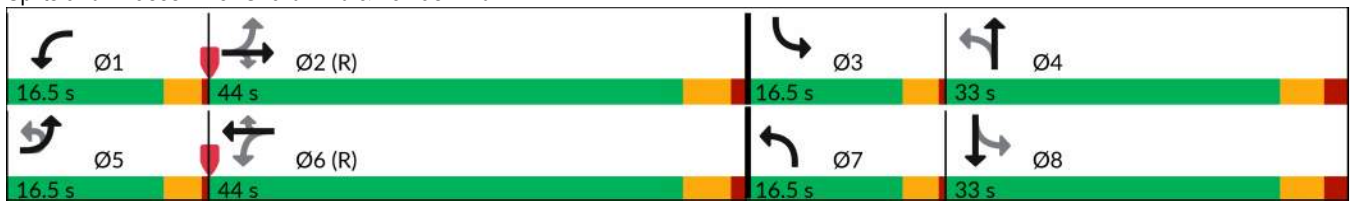
09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%	40.0%	15.0%	40.0%	40.0%	15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0	39.0	13.0	39.0	39.0	13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0			7.0
Flash Don't Walk (s)			18.0	18.0		17.0	17.0		26.0			25.0
Pedestrian Calls (#/hr)			0	0		0	0		0			0
Act Effct Green (s)		68.5	62.5	62.5	70.4	63.4	63.4	29.0	20.7		26.9	19.6
Actuated g/C Ratio		0.62	0.57	0.57	0.64	0.58	0.58	0.26	0.19		0.24	0.18
v/c Ratio		0.11	0.35	0.11	0.20	0.29	0.06	0.33	0.65		0.20	0.79
Control Delay (s/veh)		9.9	15.9	3.8	3.4	3.5	0.1	30.2	44.9		27.2	56.7
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.9	15.9	3.8	3.4	3.5	0.1	30.2	44.9		27.2	56.7
LOS		A	B	A	A	A	A	C	D		C	E
Approach Delay (s/veh)			14.1			3.2			41.4			52.1
Approach LOS			B			A			D			D
Queue Length 50th (ft)		13	144	0	8	32	0	37	137		25	170
Queue Length 95th (ft)		36	238	32	15	41	m0	64	201		47	244
Internal Link Dist (ft)			1432			1884			935			498
Turn Bay Length (ft)		120			120		240	118			128	
Base Capacity (vph)		607	2051	932	546	2081	946	296	468		337	465
Starvation Cap Reductn		0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio		0.09	0.35	0.11	0.17	0.29	0.06	0.24	0.49		0.15	0.57
Intersection Summary												
Area Type: Other												
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 19.5						Intersection LOS: B						
Intersection Capacity Utilization 60.3%						ICU Level of Service B						
Analysis Period (min) 15												
m Volume for 95th percentile queue is metered by upstream signal.												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 8: Girard Blvd & Lomas Blvd





Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	715	103	91	612	53	72	231	49	267
v/c Ratio	0.11	0.35	0.11	0.20	0.29	0.06	0.33	0.65	0.20	0.79
Control Delay (s/veh)	9.9	15.9	3.8	3.4	3.5	0.1	30.2	44.9	27.2	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.9	15.9	3.8	3.4	3.5	0.1	30.2	44.9	27.2	56.7
Queue Length 50th (ft)	13	144	0	8	32	0	37	137	25	170
Queue Length 95th (ft)	36	238	32	15	41	m0	64	201	47	244
Internal Link Dist (ft)	1432				1884				935	
Turn Bay Length (ft)	120			120			118			128
Base Capacity (vph)	607	2051	932	546	2081	946	296	468	337	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.35	0.11	0.17	0.29	0.06	0.24	0.49	0.15	0.57

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	840	86	115	765	25	35	5	125	25	5	25
Future Volume (vph)	10	840	86	115	765	25	35	5	125	25	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995				0.850		0.938	
Flt Protected	0.950			0.950				0.958			0.978	
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	0	1785	1583	0	1709	0
Flt Permitted	0.344			0.326				0.781			0.834	
Satd. Flow (perm)	641	3539	1583	607	3522	0	0	1455	1583	0	1457	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			88		5				128		26	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		663			1327			674			670	
Travel Time (s)		12.9			25.9			15.3			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	10	857	88	117	781	26	36	5	128	26	5	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	857	88	117	807	0	0	41	128	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effect Green (s)	91.2	91.2	91.2	91.2	91.2			8.8	8.8		8.8	
Actuated g/C Ratio	0.83	0.83	0.83	0.83	0.83			0.08	0.08		0.08	
v/c Ratio	0.02	0.29	0.07	0.23	0.28			0.35	0.52		0.41	
Control Delay (s/veh)	1.5	1.8	0.3	3.0	2.2			56.3	16.5		38.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.5	1.8	0.3	3.0	2.2			56.3	16.5		38.5	
LOS	A	A	A	A	A			E	B		D	
Approach Delay (s/veh)		1.7			2.3			26.2			38.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	35	0	14	54			28	0		21	
Queue Length 95th (ft)	m3	44	3	m24	58			63	57		61	
Internal Link Dist (ft)		583			1247			594			590	
Turn Bay Length (ft)	85		240	85								
Base Capacity (vph)	531	2933	1327	503	2920			443	571		461	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.02	0.29	0.07	0.23	0.28			0.09	0.22		0.12	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay (s/veh): 4.9

Intersection LOS: A

Intersection Capacity Utilization 58.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	10	857	88	117	807	41	128	57
v/c Ratio	0.02	0.29	0.07	0.23	0.28	0.35	0.52	0.41
Control Delay (s/veh)	1.5	1.8	0.3	3.0	2.2	56.3	16.5	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.5	1.8	0.3	3.0	2.2	56.3	16.5	38.5
Queue Length 50th (ft)	1	35	0	14	54	28	0	21
Queue Length 95th (ft)	m3	44	3	m24	58	63	57	61
Internal Link Dist (ft)		583			1247	594		590
Turn Bay Length (ft)	85		240	85				
Base Capacity (vph)	531	2933	1327	503	2920	443	571	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.29	0.07	0.23	0.28	0.09	0.22	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	905	10	10	814	10	40
Future Volume (vph)	905	10	10	814	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.309		0.950	
Satd. Flow (perm)	3539	1583	576	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				41
Link Speed (mph)	35			35	30	
Link Distance (ft)	650			1388	612	
Travel Time (s)	12.7			27.0	13.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	923	10	10	831	10	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	923	10	10	831	10	41
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (ft)	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4

Lomas Road Diet - Road Diet MD Diverted 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	48.5	48.5	48.5	48.5	8.1	8.1
Actuated g/C Ratio	0.88	0.88	0.88	0.88	0.15	0.15
v/c Ratio	0.30	0.01	0.02	0.27	0.04	0.15
Control Delay (s/veh)	2.3	1.7	2.7	2.2	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.3	1.7	2.7	2.2	22.0	10.1
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.3			2.2	12.4	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0	0	0	0	3	0
Queue Length 95th (ft)	79	3	4	70	14	21
Internal Link Dist (ft)	570			1308	532	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3111	1393	506	3111	775	716
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.01	0.02	0.27	0.01	0.06

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	55.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.30
Intersection Signal Delay (s/veh):	2.5
Intersection Capacity Utilization:	40.0%
Analysis Period (min):	15
Intersection LOS:	A
ICU Level of Service:	A

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	923	10	10	831	10	41
v/c Ratio	0.30	0.01	0.02	0.27	0.04	0.15
Control Delay (s/veh)	2.3	1.7	2.7	2.2	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.3	1.7	2.7	2.2	22.0	10.1
Queue Length 50th (ft)	0	0	0	0	3	0
Queue Length 95th (ft)	79	3	4	70	14	21
Internal Link Dist (ft)	570			1308	532	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3111	1393	506	3111	775	716
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.01	0.02	0.27	0.01	0.06
Intersection Summary						

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	690	119	173	573	164	121	872	166	185	851	183
Future Volume (vph)	245	690	119	173	573	164	121	872	166	185	851	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		240	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	1.00	1.00		1.00		0.98	1.00	1.00		1.00	1.00	
Frt		0.978				0.850		0.976			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4963	0	1770	3539	1583	1770	4948	0	1770	4935	0
Flt Permitted	0.282			0.248			0.177			0.142		
Satd. Flow (perm)	524	4963	0	462	3539	1557	330	4948	0	264	4935	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				167		36			43	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		698			550			672			669	
Travel Time (s)		13.6			9.4			11.5			11.4	
Confl. Peds. (#/hr)	5		2	2		5	3		8	8		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	250	704	121	177	585	167	123	890	169	189	868	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	825	0	177	585	167	123	1059	0	189	1055	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	

Lomas Road Diet - Road Diet MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2		2	8			4		
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	38.5		9.5	39.5	39.5	9.5	39.5		9.5	36.5	
Total Split (s)	16.5	37.4		16.5	37.4	37.4	18.7	37.4		18.7	37.4	
Total Split (%)	15.0%	34.0%		15.0%	34.0%	34.0%	17.0%	34.0%		17.0%	34.0%	
Maximum Green (s)	13.0	31.9		13.0	31.9	31.9	15.2	31.9		15.2	31.9	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			27.0	27.0		27.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	48.5	34.6		45.3	33.0	33.0	46.5	36.1		51.7	38.7	
Actuated g/C Ratio	0.44	0.31		0.41	0.30	0.30	0.42	0.33		0.47	0.35	
v/c Ratio	0.68	0.52		0.57	0.55	0.29	0.49	0.64		0.69	0.60	
Control Delay (s/veh)	34.0	36.1		22.5	35.5	8.2	23.6	32.9		31.4	30.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	34.0	36.1		22.5	35.5	8.2	23.6	32.9		31.4	30.0	
LOS	C	D		C	D	A	C	C		C	C	
Approach Delay (s/veh)		35.6			28.1			32.0			30.2	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	132	188		92	207	29	47	223		76	212	
Queue Length 95th (ft)	192	230		53	270	84	82	290		129	274	
Internal Link Dist (ft)		618			470			592			589	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	380	1581		355	1061	584	354	1649		334	1764	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.66	0.52		0.50	0.55	0.29	0.35	0.64		0.57	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 58 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 31.6

Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Analysis Period (min) 15

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	825	177	585	167	123	1059	189	1055
v/c Ratio	0.68	0.52	0.57	0.55	0.29	0.49	0.64	0.69	0.60
Control Delay (s/veh)	34.0	36.1	22.5	35.5	8.2	23.6	32.9	31.4	30.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.0	36.1	22.5	35.5	8.2	23.6	32.9	31.4	30.0
Queue Length 50th (ft)	132	188	92	207	29	47	223	76	212
Queue Length 95th (ft)	192	230	53	270	84	82	290	129	274
Internal Link Dist (ft)		618		470			592		589
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	380	1581	355	1061	584	354	1649	334	1764
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.52	0.50	0.55	0.29	0.35	0.64	0.57	0.60
Intersection Summary									

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	742	88	101	658	83	122	263	141	134	287	146
Future Volume (vph)	158	742	88	101	658	83	122	263	141	134	287	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00			1.00			1.00		0.99	1.00	0.99	
Frt			0.850			0.850			0.850		0.949	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3341	0
Flt Permitted	0.333			0.314			0.259			0.474		
Satd. Flow (perm)	620	3539	1583	583	3539	1583	482	3539	1561	882	3341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			144			78
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2060			2606			477			652	
Travel Time (s)		35.1			44.4			9.3			12.7	
Confl. Peds. (#/hr)	1		11	11		1	3		2	2		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	161	757	90	103	671	85	124	268	144	137	293	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	757	90	103	671	85	124	268	144	137	442	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	

Lomas Road Diet - Road Diet MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report

Page 5

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	16.5	44.0		16.5	44.0		16.5	33.0	33.0	16.5	33.0	
Total Split (%)	15.0%	40.0%		15.0%	40.0%		15.0%	30.0%	30.0%	15.0%	30.0%	
Maximum Green (s)	13.0	39.0		13.0	39.0		13.0	28.0	28.0	13.0	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	3.0	3.0	1.5	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	68.6	58.8	0.0	65.4	57.2	0.0	28.5	17.2	17.2	29.5	17.7	
Actuated g/C Ratio	0.62	0.53	0.00	0.59	0.52	0.00	0.26	0.16	0.16	0.27	0.16	
v/c Ratio	0.34	0.40	0.65	0.25	0.36	0.61	0.52	0.48	0.39	0.43	0.73	
Control Delay (s/veh)	8.4	10.3	36.4	10.6	18.0	20.4	35.6	44.6	9.5	32.3	43.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.4	10.3	36.4	10.6	18.0	20.4	35.6	44.6	9.5	32.3	43.1	
LOS	A	B	D	B	B	C	D	D	A	C	D	
Approach Delay (s/veh)		12.3			17.3			33.1			40.5	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)	0	72	37	26	140	0	66	92	0	74	130	
Queue Length 95th (ft)	m44	171	m#105	59	234	#24	101	125	52	110	175	
Internal Link Dist (ft)		1980			2526			397			572	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	533	1892	139	510	1840	139	288	900	504	356	908	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.40	0.65	0.20	0.36	0.61	0.43	0.30	0.29	0.38	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 23.0

Intersection LOS: C

Intersection Capacity Utilization 63.5%

ICU Level of Service B

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

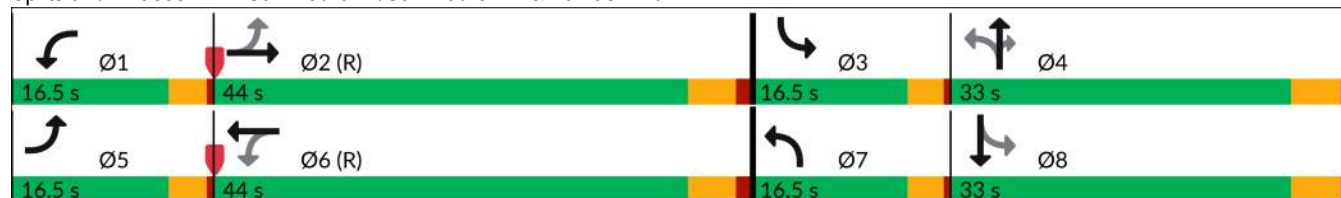
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	757	90	103	671	85	124	268	144	137	442
v/c Ratio	0.34	0.40	0.65	0.25	0.36	0.61	0.52	0.48	0.39	0.43	0.73
Control Delay (s/veh)	8.4	10.3	36.4	10.6	18.0	20.4	35.6	44.6	9.5	32.3	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	10.3	36.4	10.6	18.0	20.4	35.6	44.6	9.5	32.3	43.1
Queue Length 50th (ft)	0	72	37	26	140	0	66	92	0	74	130
Queue Length 95th (ft)	m44	171	m#105	59	234	#24	101	125	52	110	175
Internal Link Dist (ft)	1980			2526			397			572	
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	533	1892	139	510	1840	139	288	900	504	356	908
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.40	0.65	0.20	0.36	0.61	0.43	0.30	0.29	0.38	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Future Volume (vph)	3	67	775	55	52	681	52	37	132	62	59	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	1.00		1.00	0.99		1.00	1.00
Frt				0.850		0.989			0.952			0.962
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3565	0	1805	1800	0	1805	1819
Flt Permitted		0.357			0.340			0.335			0.384	
Satd. Flow (perm)	0	678	3610	1615	646	3565	0	635	1800	0	728	1819
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				56		13			22			16
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			663			1574			392
Travel Time (s)			27.0			12.9			35.8			8.9
Confl. Peds. (#/hr)					1		1	3		3	2	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	68	791	56	53	695	53	38	135	63	60	161
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	791	56	53	748	0	38	198	0	60	215
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		37	37		36	36
Trailing Detector (ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	54
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		83.4	83.4	83.4	83.4	83.4		16.6	16.6		16.6	16.6
Actuated g/C Ratio		0.76	0.76	0.76	0.76	0.76		0.15	0.15		0.15	0.15
v/c Ratio		0.14	0.29	0.05	0.11	0.28		0.40	0.68		0.55	0.75
Control Delay (s/veh)		5.3	4.9	1.4	2.7	2.4		52.7	50.5		60.3	56.5
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		5.3	4.9	1.4	2.7	2.4		52.7	50.5		60.3	56.5
LOS		A	A	A	A	A		D	D		E	E
Approach Delay (s/veh)			4.7			2.4			50.8			57.4
Approach LOS			A			A			D			E
Queue Length 50th (ft)		11	76	0	5	37		25	119		40	136
Queue Length 95th (ft)		32	128	11	11	44		56	183		81	204
Internal Link Dist (ft)			1308			583			1494			312
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		513	2735	1237	489	2704		193	563		221	565
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.14	0.29	0.05	0.11	0.28		0.20	0.35		0.27	0.38

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 15.3
Intersection Capacity Utilization 70.6%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service C

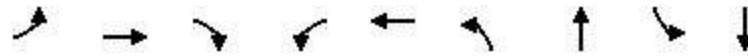
Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	791	56	53	748	38	198	60	215
v/c Ratio	0.14	0.29	0.05	0.11	0.28	0.40	0.68	0.55	0.75
Control Delay (s/veh)	5.3	4.9	1.4	2.7	2.4	52.7	50.5	60.3	56.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.3	4.9	1.4	2.7	2.4	52.7	50.5	60.3	56.5
Queue Length 50th (ft)	11	76	0	5	37	25	119	40	136
Queue Length 95th (ft)	32	128	11	11	44	56	183	81	204
Internal Link Dist (ft)		1308			583		1494		312
Turn Bay Length (ft)	113		240	145		120		90	
Base Capacity (vph)	513	2735	1237	489	2704	193	563	221	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.29	0.05	0.11	0.28	0.20	0.35	0.27	0.38

Intersection Summary

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Future Volume (vph)	117	599	33	2	31	79	553	96	1	26	217	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240			100		240		112		0
Storage Lanes	1		0			1		0		1		0
Taper Length (ft)	25					25				25		
Lane Util. Factor	1.00	0.91	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				1.00	1.00			0.98	1.00	
Frt		0.992					0.978				0.976	
Flt Protected	0.950					0.950				0.950		
Satd. Flow (prot)	1805	5139	0	0	0	1805	5054	0	0	1738	1850	0
Flt Permitted	0.304					0.324				0.631		
Satd. Flow (perm)	578	5139	0	0	0	613	5054	0	0	1131	1850	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)							28				7	
Link Speed (mph)		35					35				30	
Link Distance (ft)		688					662				1176	
Travel Time (s)		13.4					12.9				26.7	
Confl. Peds. (#/hr)					3	3		3	4	4		4
Confl. Bikes (#/hr)				1								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	119	611	34	2	32	81	564	98	1	27	221	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	647	0	0	0	113	662	0	0	28	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Left	Right
Median Width(ft)		12					12				12	
Link Offset(ft)		0					0				0	
Crosswalk Width(ft)		16					16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	15		9	15	15		9
Number of Detectors	1	1			1	1	1		1	1	1	
Detector Template	Left	Thru			Left	Left	Thru		Left	Left	Thru	
Leading Detector (ft)	36	100			20	20	100		20	20	25	
Trailing Detector (ft)	1	0			10	0	0		0	15	35	
Detector 1 Position(ft)	1	0			10	0	0		0	15	35	
Detector 1 Size(ft)	35	100			10	20	100		20	5	-10	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA		Perm	Split	NA	
Protected Phases	5	2			1	1	6			8	8	
Permitted Phases	2				6	6			8			
Detector Phase	5	2			1	1	6		8	8	8	

Lomas Road Diet - Road Diet MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

							
Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Lane Configurations							
Traffic Volume (vph)	126	198	96	110	114	104	1
Future Volume (vph)	126	198	96	110	114	104	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		115		0	170	
Storage Lanes	1		2		1	2	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Ped Bike Factor	0.99				1.00		
Frt			0.850	0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	1805	1900	1615	1615	1805	2842	0
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	1787	1900	1615	1615	1800	2842	0
Right Turn on Red				Yes			Yes
Satd. Flow (RTOR)				119		174	
Link Speed (mph)		30			35		
Link Distance (ft)		634			350		
Travel Time (s)		14.4			6.8		
Confl. Peds. (#/hr)	6		6	6	1	1	1
Confl. Bikes (#/hr)			1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	129	202	98	112	116	106	1
Shared Lane Traffic (%)							
Lane Group Flow (vph)	129	202	98	112	116	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Right	Right
Median Width(ft)		12			12		
Link Offset(ft)		0			0		
Crosswalk Width(ft)		16			16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15	9	9
Number of Detectors	1	1	1	1	1	1	
Detector Template	Left	Thru	Right	Right	Left	Right	
Leading Detector (ft)	35	40	40	40	20	20	
Trailing Detector (ft)	10	10	10	10	0	0	
Detector 1 Position(ft)	10	10	10	10	0	0	
Detector 1 Size(ft)	25	30	30	30	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Split	NA	pt+ov	custom	Prot	Prot	
Protected Phases	4	4	3 4	3 4	3	3	
Permitted Phases							
Detector Phase	4	4	3 4	3 4	3	3	

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Switch Phase												
Minimum Initial (s)	3.0	16.0			3.0	3.0	16.0		8.0	8.0	8.0	
Minimum Split (s)	18.0	31.0			18.0	18.0	33.5		37.5	37.5	37.5	
Total Split (s)	16.5	27.5			16.5	16.5	27.5		22.0	22.0	22.0	
Total Split (%)	15.0%	25.0%			15.0%	15.0%	25.0%		20.0%	20.0%	20.0%	
Maximum Green (s)	13.0	21.5			13.0	13.0	22.0		16.5	16.5	16.5	
Yellow Time (s)	3.0	4.0			3.0	3.0	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5	2.0			0.5	0.5	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0				0.0	0.0			0.0	0.0	
Total Lost Time (s)	3.5	6.0				3.5	5.5			5.5	5.5	
Lead/Lag	Lead	Lag			Lead	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	1.5	3.0			1.5	1.5	3.0		2.0	2.0	2.0	
Recall Mode	None	C-Max			None	None	Max		None	None	None	
Walk Time (s)		7.0					7.0		7.0	7.0	7.0	
Flash Don't Walk (s)		18.0					21.0		25.0	25.0	25.0	
Pedestrian Calls (#/hr)		0					0		0	0	0	
Act Effct Green (s)	42.7	31.4				42.2	31.7			18.3	18.3	
Actuated g/C Ratio	0.39	0.29				0.38	0.29			0.17	0.17	
v/c Ratio	0.37	0.44				0.35	0.45			0.15	0.84	
Control Delay (s/veh)	15.8	26.3				25.2	33.6			41.6	67.2	
Queue Delay	0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay (s/veh)	15.8	26.3				25.2	33.6			41.6	67.2	
LOS	B	C				C	C			D	E	
Approach Delay (s/veh)		24.6					32.4				64.8	
Approach LOS		C					C				E	
Queue Length 50th (ft)	52	150				52	140			17	171	
Queue Length 95th (ft)	32	200				95	194			45	#340	
Internal Link Dist (ft)		608					582				1096	
Turn Bay Length (ft)	95					100				112		
Base Capacity (vph)	383	1467				392	1475			190	316	
Starvation Cap Reductn	0	0				0	0			0	0	
Spillback Cap Reductn	0	0				0	0			0	0	
Storage Cap Reductn	0	0				0	0			0	0	
Reduced v/c Ratio	0.31	0.44				0.29	0.45			0.15	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 42 (38%), Referenced to phase 2:EBTL, Start of Green												
Natural Cycle: 135												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.84												
Intersection Signal Delay (s/veh): 35.8						Intersection LOS: D						
Intersection Capacity Utilization 79.9%						ICU Level of Service D						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 16.5 s	 Ø2 (R) 27.5 s	 Ø3 22 s	 Ø4 22 s	 Ø8 22 s
 Ø5 16.5 s	 Ø6 27.5 s			

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBL	SBT	SBR	SBR2	NEL	NER	NER2
Switch Phase							
Minimum Initial (s)	8.0	8.0			8.0	8.0	
Minimum Split (s)	24.0	24.0			22.0	22.0	
Total Split (s)	22.0	22.0			22.0	22.0	
Total Split (%)	20.0%	20.0%			20.0%	20.0%	
Maximum Green (s)	16.5	16.5			17.5	17.5	
Yellow Time (s)	3.5	3.5			3.5	3.5	
All-Red Time (s)	2.0	2.0			1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	
Total Lost Time (s)	5.5	5.5			4.5	4.5	
Lead/Lag	Lag	Lag			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0			2.0	2.0	
Recall Mode	None	None			None	None	
Walk Time (s)	0.0	0.0					
Flash Don't Walk (s)	0.0	0.0					
Pedestrian Calls (#/hr)	0	0					
Act Effect Green (s)	15.3	15.3	32.3	32.3	11.5	11.5	
Actuated g/C Ratio	0.14	0.14	0.29	0.29	0.10	0.10	
v/c Ratio	0.52	0.77	0.21	0.20	0.61	0.24	
Control Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	50.8	64.4	28.5	4.9	60.6	1.9	
LOS	D	E	C	A	E	A	
Approach Delay (s/veh)		42.3			32.4		
Approach LOS		D			C		
Queue Length 50th (ft)	85	138	52	0	80	0	
Queue Length 95th (ft)	143	214	86	34	134	3	
Internal Link Dist (ft)		554			270		
Turn Bay Length (ft)	130		115	115		170	
Base Capacity (vph)	282	297	493	576	287	598	
Starvation Cap Reductn	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.68	0.20	0.19	0.40	0.18	
Intersection Summary							

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	119	647	113	662	28	263	129	202	98	112	116	107
v/c Ratio	0.37	0.44	0.35	0.45	0.15	0.84	0.52	0.77	0.21	0.20	0.61	0.24
Control Delay (s/veh)	15.8	26.3	25.2	33.6	41.6	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.8	26.3	25.2	33.6	41.6	67.2	50.8	64.4	28.5	4.9	60.6	1.9
Queue Length 50th (ft)	52	150	52	140	17	171	85	138	52	0	80	0
Queue Length 95th (ft)	32	200	95	194	45	#340	143	214	86	34	134	3
Internal Link Dist (ft)		608		582		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	383	1467	392	1475	190	316	282	297	493	576	287	598
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.29	0.45	0.15	0.83	0.46	0.68	0.20	0.19	0.40	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Future Volume (vph)	2	52	641	101	89	530	52	71	149	77	48	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		0	120		240	118		0	128	
Storage Lanes		1		1	1		1	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.97	1.00		0.97	1.00	0.99		1.00	1.00
Frt				0.850			0.850		0.949			0.956
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3610	1615	1805	1792	0	1805	1807
Flt Permitted		0.427			0.355			0.272			0.407	
Satd. Flow (perm)	0	803	3610	1562	674	3610	1572	516	1792	0	772	1807
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				103			94		23			18
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1512			1964			1015			578
Travel Time (s)			29.5			38.3			23.1			13.1
Confl. Peds. (#/hr)	6	6		6	2		2	2		2	2	
Confl. Bikes (#/hr)							2			4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	53	654	103	91	541	53	72	152	79	49	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	654	103	91	541	53	72	231	0	49	267
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	0	1	1	0	1	1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru
Leading Detector (ft)	20	36	0	20	36	0	20	36	36		36	36
Trailing Detector (ft)	0	3	0	0	2	0	0	1	1		3	3
Detector 1 Position(ft)	0	3	0	0	2	0	0	1	1		3	3
Detector 1 Size(ft)	20	33	6	20	34	6	20	35	35		33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA
Protected Phases		5	2		1	6		7	4		3	8
Permitted Phases	5	2		2	6		6	4			8	
Detector Phase	5	5	2	2	1	6	6	7	4		3	8

Lomas Road Diet - Road Diet MD 12:00 pm 05/20/2024 Baseline

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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	77
Future Volume (vph)	77
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	3
Peak Hour Factor	0.98
Heavy Vehicles (%)	0%
Adj. Flow (vph)	79
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

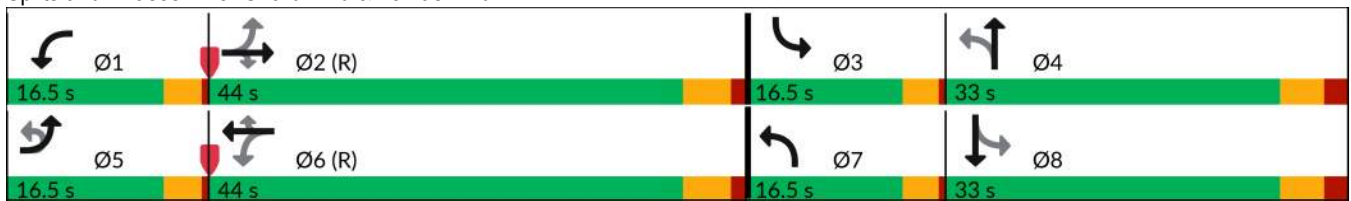
09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	8.0
Minimum Split (s)	16.5	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0
Total Split (s)	16.5	16.5	44.0	44.0	16.5	44.0	44.0	16.5	33.0		16.5	33.0
Total Split (%)	15.0%	15.0%	40.0%	40.0%	15.0%	40.0%	40.0%	15.0%	30.0%		15.0%	30.0%
Maximum Green (s)	13.0	13.0	39.0	39.0	13.0	39.0	39.0	13.0	27.5		13.0	27.5
Yellow Time (s)	3.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.5
All-Red Time (s)	0.5	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5		3.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.5	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	2.0
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None
Walk Time (s)			7.0	7.0		7.0	7.0		7.0			7.0
Flash Don't Walk (s)			18.0	18.0		17.0	17.0		26.0			25.0
Pedestrian Calls (#/hr)			0	0		0	0		0			0
Act Effct Green (s)		68.5	62.5	62.5	70.4	63.4	63.4	29.0	20.7		26.9	19.6
Actuated g/C Ratio		0.62	0.57	0.57	0.64	0.58	0.58	0.26	0.19		0.24	0.18
v/c Ratio		0.10	0.32	0.11	0.18	0.26	0.06	0.33	0.65		0.20	0.79
Control Delay (s/veh)		9.8	15.6	3.8	3.2	3.2	0.1	30.2	44.9		27.2	56.7
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.8	15.6	3.8	3.2	3.2	0.1	30.2	44.9		27.2	56.7
LOS		A	B	A	A	A	A	C	D		C	E
Approach Delay (s/veh)			13.7			3.0			41.4			52.1
Approach LOS			B			A			D			D
Queue Length 50th (ft)		13	130	0	6	25	0	37	137		25	170
Queue Length 95th (ft)		36	215	32	13	33	0	64	201		47	244
Internal Link Dist (ft)			1432			1884			935			498
Turn Bay Length (ft)		120			120		240	118			128	
Base Capacity (vph)		645	2051	932	576	2081	946	296	468		337	465
Starvation Cap Reductn		0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio		0.09	0.32	0.11	0.16	0.26	0.06	0.24	0.49		0.15	0.57
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 92 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												
Intersection Signal Delay (s/veh): 19.9					Intersection LOS: B							
Intersection Capacity Utilization 60.3%					ICU Level of Service B							
Analysis Period (min) 15												

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

Splits and Phases: 8: Girard Blvd & Lomas Blvd





Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

8: Girard Blvd & Lomas Blvd

09/03/2025

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	654	103	91	541	53	72	231	49	267
v/c Ratio	0.10	0.32	0.11	0.18	0.26	0.06	0.33	0.65	0.20	0.79
Control Delay (s/veh)	9.8	15.6	3.8	3.2	3.2	0.1	30.2	44.9	27.2	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.8	15.6	3.8	3.2	3.2	0.1	30.2	44.9	27.2	56.7
Queue Length 50th (ft)	13	130	0	6	25	0	37	137	25	170
Queue Length 95th (ft)	36	215	32	13	33	0	64	201	47	244
Internal Link Dist (ft)	1432			1884			935			498
Turn Bay Length (ft)	120			120		240	118		128	
Base Capacity (vph)	645	2051	932	576	2081	946	296	468	337	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.32	0.11	0.16	0.26	0.06	0.24	0.49	0.15	0.57
Intersection Summary										

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	800	86	115	725	25	35	5	125	25	5	25
Future Volume (vph)	10	800	86	115	725	25	35	5	125	25	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995				0.850		0.938	
Flt Protected	0.950			0.950				0.958			0.978	
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	0	1785	1583	0	1709	0
Flt Permitted	0.360			0.341				0.781			0.834	
Satd. Flow (perm)	671	3539	1583	635	3522	0	0	1455	1583	0	1457	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			88		6				128		26	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		663			1326			674			670	
Travel Time (s)		12.9			25.8			15.3			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	10	816	88	117	740	26	36	5	128	26	5	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	816	88	117	766	0	0	41	128	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		

Lomas Road Diet - Road Diet MD 12:00 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effect Green (s)	91.2	91.2	91.2	91.2	91.2			8.8	8.8		8.8	
Actuated g/C Ratio	0.83	0.83	0.83	0.83	0.83			0.08	0.08		0.08	
v/c Ratio	0.02	0.28	0.07	0.22	0.26			0.35	0.52		0.41	
Control Delay (s/veh)	1.5	1.8	0.3	3.1	2.3			56.3	16.5		38.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	1.5	1.8	0.3	3.1	2.3			56.3	16.5		38.5	
LOS	A	A	A	A	A			E	B		D	
Approach Delay (s/veh)		1.7			2.4			26.2			38.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	33	0	14	47			28	0		21	
Queue Length 95th (ft)	m3	41	3	m28	65			63	57		61	
Internal Link Dist (ft)		583			1246			594			590	
Turn Bay Length (ft)			240	85								
Base Capacity (vph)	556	2933	1327	526	2920			443	571		461	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.02	0.28	0.07	0.22	0.26			0.09	0.22		0.12	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay (s/veh): 5.1

Intersection LOS: A

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	10	816	88	117	766	41	128	57
v/c Ratio	0.02	0.28	0.07	0.22	0.26	0.35	0.52	0.41
Control Delay (s/veh)	1.5	1.8	0.3	3.1	2.3	56.3	16.5	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.5	1.8	0.3	3.1	2.3	56.3	16.5	38.5
Queue Length 50th (ft)	1	33	0	14	47	28	0	21
Queue Length 95th (ft)	m3	41	3	m28	65	63	57	61
Internal Link Dist (ft)		583			1246	594		590
Turn Bay Length (ft)			240	85				
Base Capacity (vph)	556	2933	1327	526	2920	443	571	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.28	0.07	0.22	0.26	0.09	0.22	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	860	10	10	764	10	40
Future Volume (vph)	860	10	10	764	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.323		0.950	
Satd. Flow (perm)	3539	1583	602	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				41
Link Speed (mph)	35			35	30	
Link Distance (ft)	640			1388	612	
Travel Time (s)	12.5			27.0	13.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	878	10	10	780	10	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	878	10	10	780	10	41
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (ft)	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	48.5	48.5	48.5	48.5	8.1	8.1
Actuated g/C Ratio	0.88	0.88	0.88	0.88	0.15	0.15
v/c Ratio	0.28	0.01	0.02	0.25	0.04	0.15
Control Delay (s/veh)	2.2	1.7	2.6	2.1	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.2	1.7	2.6	2.1	22.0	10.1
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.2			2.1	12.4	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0	0	0	0	3	0
Queue Length 95th (ft)	74	3	4	64	14	21
Internal Link Dist (ft)	560			1308	532	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3111	1393	529	3111	775	716
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.01	0.02	0.25	0.01	0.06

Intersection Summary

Area Type:	Other
Cycle Length: 66	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay (s/veh): 2.5	Intersection LOS: A
Intersection Capacity Utilization 38.8%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	878	10	10	780	10	41
v/c Ratio	0.28	0.01	0.02	0.25	0.04	0.15
Control Delay (s/veh)	2.2	1.7	2.6	2.1	22.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.2	1.7	2.6	2.1	22.0	10.1
Queue Length 50th (ft)	0	0	0	0	3	0
Queue Length 95th (ft)	74	3	4	64	14	21
Internal Link Dist (ft)	560			1308	532	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3111	1393	529	3111	775	716
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.01	0.02	0.25	0.01	0.06
Intersection Summary						

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			  			  	
Traffic Volume (vph)	261	1077	163	151	766	237	164	1315	192	174	1052	177
Future Volume (vph)	261	1077	163	151	766	237	164	1315	192	174	1052	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		240	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.980				0.850		0.981			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4984	0	1770	3539	1583	1770	4989	0	1770	4973	0
Flt Permitted	0.122			0.136			0.119			0.098		
Satd. Flow (perm)	227	4984	0	253	3539	1583	222	4989	0	183	4973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				247		25			34	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		703			533			649			665	
Travel Time (s)		13.7			9.1			11.1			11.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	1122	170	157	798	247	171	1370	200	181	1096	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	1292	0	157	798	247	171	1570	0	181	1280	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	19.0	28.6		24.2	33.8	33.8	11.0	38.5		18.7	46.2	
Total Split (%)	17.3%	26.0%		22.0%	30.7%	30.7%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	15.5	23.1		20.7	28.3	28.3	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	48.8	33.7		41.5	29.4	29.4	47.0	37.5		52.3	40.7	
Actuated g/C Ratio	0.44	0.31		0.38	0.27	0.27	0.43	0.34		0.48	0.37	
v/c Ratio	0.90	0.84		0.67	0.84	0.41	0.86	0.92		0.75	0.69	
Control Delay (s/veh)	52.5	39.9		43.1	37.7	4.6	57.9	44.3		40.1	30.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	52.5	39.9		43.1	37.7	4.6	57.9	44.3		40.1	30.8	

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		D	D	A	E	D		D	C	
Approach Delay (s/veh)		42.1			31.6			45.6			31.9	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	141	316		43	295	51	66	379		71	269	
Queue Length 95th (ft)	#278	#428		119	#394	19	#198	#532		145	322	
Internal Link Dist (ft)		623			453			569			585	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	318	1542		398	945	603	200	1715		308	1861	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.86	0.84		0.39	0.84	0.41	0.86	0.92		0.59	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 38.5

Intersection LOS: D

Intersection Capacity Utilization 90.8%

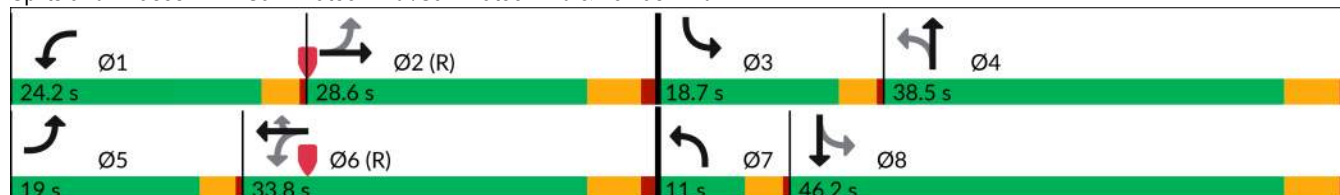
ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	272	1292	157	798	247	171	1570	181	1280
v/c Ratio	0.90	0.84	0.67	0.84	0.41	0.86	0.92	0.75	0.69
Control Delay (s/veh)	52.5	39.9	43.1	37.7	4.6	57.9	44.3	40.1	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	39.9	43.1	37.7	4.6	57.9	44.3	40.1	30.8
Queue Length 50th (ft)	141	316	43	295	51	66	379	71	269
Queue Length 95th (ft)	#278	#428	119	#394	19	#198	#532	145	322
Internal Link Dist (ft)		623		453			569		585
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	318	1542	398	945	603	200	1715	308	1861
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.84	0.39	0.84	0.41	0.86	0.92	0.59	0.69

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	1110	82	119	847	89	172	481	274	171	412	118
Future Volume (vph)	185	1110	82	119	847	89	172	481	274	171	412	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3422	0
Flt Permitted	0.220			0.133			0.185			0.273		
Satd. Flow (perm)	410	3539	1583	248	3539	1583	345	3539	1583	509	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			239		32	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2066			2631			468			660	
Travel Time (s)		35.2			44.8			9.1			12.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	1156	85	124	882	93	179	501	285	178	429	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	193	1156	85	124	882	93	179	501	285	178	552	0
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	62.9	52.4	0.0	60.7	51.3	0.0	35.3	22.5	22.5	33.0	21.4	
Actuated g/C Ratio	0.57	0.48	0.00	0.55	0.47	0.00	0.32	0.20	0.20	0.30	0.19	
v/c Ratio	0.56	0.69	0.61	0.50	0.53	0.67	0.70	0.69	0.56	0.66	0.80	
Control Delay (s/veh)	13.9	18.8	28.7	18.7	23.9	25.9	40.0	45.3	11.8	37.9	48.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	13.9	18.8	28.7	18.7	23.9	25.9	40.0	45.3	11.8	37.9	48.7	

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 4

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	C	B	C	C	D	D	B	D	D	
Approach Delay (s/veh)		18.7			23.5			34.4			46.1	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	21	411	27	37	232	0	91	173	27	90	186	
Queue Length 95th (ft)	m44	m#532	m45	75	334	#40	132	212	98	132	232	
Internal Link Dist (ft)		1986			2551			388			580	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	363	1685	139	325	1649	139	283	971	607	279	894	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.53	0.69	0.61	0.38	0.53	0.67	0.63	0.52	0.47	0.64	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 28.3

Intersection LOS: C

Intersection Capacity Utilization 77.0%

ICU Level of Service D

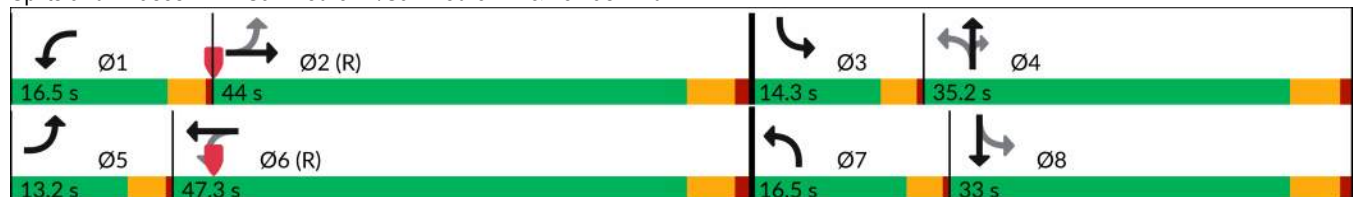
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	193	1156	85	124	882	93	179	501	285	178	552
v/c Ratio	0.56	0.69	0.61	0.50	0.53	0.67	0.70	0.69	0.56	0.66	0.80
Control Delay (s/veh)	13.9	18.8	28.7	18.7	23.9	25.9	40.0	45.3	11.8	37.9	48.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.9	18.8	28.7	18.7	23.9	25.9	40.0	45.3	11.8	37.9	48.7
Queue Length 50th (ft)	21	411	27	37	232	0	91	173	27	90	186
Queue Length 95th (ft)	m44	m#532	m45	75	334	#40	132	212	98	132	232
Internal Link Dist (ft)	1986			2551			388			580	
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	363	1685	139	325	1649	139	283	971	607	279	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.69	0.61	0.38	0.53	0.67	0.63	0.52	0.47	0.64	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1115	84	85	1083	59	67	179	87	55	242
Future Volume (vph)	3	69	1115	84	85	1083	59	67	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98		1.00		1.00	0.99		1.00	1.00
Frt				0.850		0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.201			0.209			0.253			0.287	
Satd. Flow (perm)	0	382	3610	1580	397	3577	0	479	1793	0	545	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				88		9			23			8
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			666			633			385
Travel Time (s)			27.0			13.0			14.4			8.8
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1161	88	89	1128	61	70	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1161	88	89	1189	0	70	277	0	57	293
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		78.4	78.4	78.4	78.4	78.4		21.6	21.6		21.6	21.6
Actuated g/C Ratio		0.71	0.71	0.71	0.71	0.71		0.20	0.20		0.20	0.20

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
Page 7

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.28	0.45	0.08	0.31	0.47		0.74	0.75		0.54	0.79
Control Delay (s/veh)		10.4	8.1	1.7	6.0	3.8		82.9	50.1		56.5	55.7
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		10.4	8.1	1.7	6.0	3.8		82.9	50.1		56.5	55.7
LOS		B	A	A	A	A		F	D		E	E
Approach Delay (s/veh)			7.8			4.0			56.8			55.8
Approach LOS			A			A			E			E
Queue Length 50th (ft)		17	160	0	9	61		47	171		37	194
Queue Length 95th (ft)		52	260	17	14	60		#103	242		75	265
Internal Link Dist (ft)			1308			586			553			305
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		272	2572	1150	283	2551		145	562		165	570
Starvation Cap Reductn		0	0	0	0	186		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.28	0.45	0.08	0.31	0.50		0.48	0.49		0.35	0.51

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 16.5

Intersection LOS: B

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Washington St & Lomas Blvd



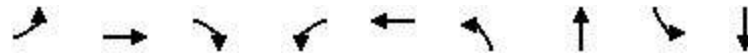


Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	75	1161	88	89	1189	70	277	57	293
v/c Ratio	0.28	0.45	0.08	0.31	0.47	0.74	0.75	0.54	0.79
Control Delay (s/veh)	10.4	8.1	1.7	6.0	3.8	82.9	50.1	56.5	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.4	8.1	1.7	6.0	3.8	82.9	50.1	56.5	55.7
Queue Length 50th (ft)	17	160	0	9	61	47	171	37	194
Queue Length 95th (ft)	52	260	17	14	60	#103	242	75	265
Internal Link Dist (ft)		1308			586		553		305
Turn Bay Length (ft)	113		240	145		120		90	
Base Capacity (vph)	272	2572	1150	283	2551	145	562	165	570
Starvation Cap Reductn	0	0	0	0	186	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.45	0.08	0.31	0.50	0.48	0.49	0.35	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		  				  						
Traffic Volume (vph)	137	979	59	20	107	920	92	51	263	31	117	236
Future Volume (vph)	137	979	59	20	107	920	92	51	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240		100		240	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99	1.00		0.99	
Frt		0.992				0.986			0.984			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5138	0	0	1805	5100	0	1805	1866	0	1805	1900
Flt Permitted	0.136				0.135			0.950			0.950	
Satd. Flow (perm)	258	5138	0	0	256	5100	0	1787	1866	0	1786	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						12			4			
Link Speed (mph)		35				35			30			30
Link Distance (ft)		678				652			1176			634
Travel Time (s)		13.2				12.7			26.7			14.4
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	1020	61	21	111	958	96	53	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	1081	0	0	132	1054	0	53	306	0	122	246
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases	5	2		1	1	6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	1	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	31.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.0%	25.0%		15.0%	15.0%	25.0%		20.0%	20.0%		20.0%	20.0%
Maximum Green (s)	14.5	24.0		14.5	14.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	0.5	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0			3.5	5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	None	Max		None	None		None	None
Walk Time (s)		7.0				7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0				21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0				0		0	0		0	0
Act Effct Green (s)	42.6	29.6			41.6	29.6		21.7	21.7		18.2	18.2
Actuated g/C Ratio	0.36	0.25			0.35	0.25		0.18	0.18		0.15	0.15

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
Page 12

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		130		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Turn Type	pt+ov	custom	Prot	Prot
Protected Phases	3 4	3 4	3	3
Permitted Phases				
Detector Phase	3 4	3 4	3	3
Switch Phase				
Minimum Initial (s)			8.0	8.0
Minimum Split (s)			22.0	22.0
Total Split (s)			24.0	24.0
Total Split (%)			20.0%	20.0%
Maximum Green (s)			19.5	19.5
Yellow Time (s)			3.5	3.5
All-Red Time (s)			1.0	1.0
Lost Time Adjust (s)			0.0	0.0
Total Lost Time (s)			4.5	4.5
Lead/Lag			Lead	Lead
Lead-Lag Optimize?			Yes	Yes
Vehicle Extension (s)			2.0	2.0
Recall Mode			None	None
Walk Time (s)				
Flash Don't Walk (s)				
Pedestrian Calls (#/hr)				
Act Effect Green (s)	39.3	39.3	15.6	15.6
Actuated g/C Ratio	0.33	0.33	0.13	0.13

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.64	0.85			0.61	0.83		0.16	0.90		0.45	0.86
Control Delay (s/veh)	31.5	35.7			38.0	49.7		45.0	77.9		51.7	76.5
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	31.5	35.7			38.0	49.7		45.0	77.9		51.7	76.5
LOS	C	D			D	D		D	E		D	E
Approach Delay (s/veh)		35.2				48.4			73.1			46.8
Approach LOS		D				D			E			D
Queue Length 50th (ft)	31	304			69	285		36	237		85	183
Queue Length 95th (ft)	m86	#427			116	#404		75	#440		149	#325
Internal Link Dist (ft)		598				572			1096			554
Turn Bay Length (ft)	95				100			112			130	
Base Capacity (vph)	283	1268			282	1268		326	340		287	302
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.51	0.85			0.47	0.83		0.16	0.90		0.43	0.81

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 42 (35%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 47.4

Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

	Ø1		Ø2 (R)		Ø3		Ø4		Ø8
18 s		30 s		24 s		24 s		24 s	
	Ø5		Ø6						
18 s		30 s							

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
v/c Ratio	0.29	0.21	0.77	0.39
Control Delay (s/veh)	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.5	5.2	71.6	50.1
LOS	C	A	E	D
Approach Delay (s/veh)	62.1			
Approach LOS	E			
Queue Length 50th (ft)	84	0	137	58
Queue Length 95th (ft)	137	41	210	92
Internal Link Dist (ft)	270			
Turn Bay Length (ft)	115	115	170	
Base Capacity (vph)	528	615	293	461
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.21	0.62	0.31
Intersection Summary				

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	143	1081	132	1054	53	306	122	246	153	130	181	144
v/c Ratio	0.64	0.85	0.61	0.83	0.16	0.90	0.45	0.86	0.29	0.21	0.77	0.39
Control Delay (s/veh)	31.5	35.7	38.0	49.7	45.0	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.5	35.7	38.0	49.7	45.0	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Length 50th (ft)	31	304	69	285	36	237	85	183	84	0	137	58
Queue Length 95th (ft)	m86	#427	116	#404	75	#440	149	#325	137	41	210	92
Internal Link Dist (ft)		598		572		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	283	1268	282	1268	326	340	287	302	528	615	293	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.85	0.47	0.83	0.16	0.90	0.43	0.81	0.29	0.21	0.62	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	981	131	133	915	70	68	238	131	1	78	297
Future Volume (vph)	104	981	131	133	915	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		240	118		0		128	
Storage Lanes	1		1	1		1	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95			0.97	1.00	0.99			0.99	0.99
Frt			0.850			0.850		0.947				0.961
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1805	3610	1615	1805	3610	1615	1805	1787	0	0	1805	1811
Flt Permitted	0.200			0.160			0.193				0.232	
Satd. Flow (perm)	379	3610	1542	304	3610	1561	366	1787	0	0	436	1811
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			136			86		21				13
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1517			1974			1014				578
Travel Time (s)		29.6			38.5			23.0				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	1022	136	139	953	73	71	248	136	1	81	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	1022	136	139	953	73	71	384	0	0	82	416
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2		2	6		6	4			3	8	
Detector Phase	5	2	2	1	6	6	7	4		3	3	8
Switch Phase												
Minimum Initial (s)	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6	51.6	18.0	51.6	51.6	18.0	38.5		18.0	18.0	37.5
Total Split (s)	18.0	51.6	51.6	18.0	51.6	51.6	18.0	32.4		18.0	18.0	32.4
Total Split (%)	15.0%	43.0%	43.0%	15.0%	43.0%	43.0%	15.0%	27.0%		15.0%	15.0%	27.0%
Maximum Green (s)	14.5	46.6	46.6	14.5	46.6	46.6	14.5	26.9		14.5	14.5	26.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0				7.0
Flash Don't Walk (s)		18.0	18.0		17.0	17.0		26.0				25.0
Pedestrian Calls (#/hr)		0	0		0	0		0				0
Act Effect Green (s)	64.5	55.7	55.7	67.1	57.0	57.0	40.5	32.4			41.3	32.8
Actuated g/C Ratio	0.54	0.46	0.46	0.56	0.48	0.48	0.34	0.27			0.34	0.27

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lanes, Volumes, Timings

8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.37	0.61	0.17	0.50	0.56	0.09	0.34	0.77			0.35	0.83
Control Delay (s/veh)	16.4	27.3	4.2	27.1	6.4	0.2	28.5	50.0			28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.4	27.3	4.2	27.1	6.4	0.2	28.5	50.0			28.3	54.7
LOS	B	C	A	C	A	A	C	D			C	D
Approach Delay (s/veh)		23.9			8.5			46.6				50.4
Approach LOS		C			A			D				D
Queue Length 50th (ft)	38	319	0	38	50	1	34	256			40	289
Queue Length 95th (ft)	67	417	39	m71	82	m0	66	#417			75	#469
Internal Link Dist (ft)		1437			1894			934				498
Turn Bay Length (ft)	120			120		240	118				128	
Base Capacity (vph)	390	1675	788	356	1715	787	307	497			323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0			0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0			0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0			0	0
Reduced v/c Ratio	0.28	0.61	0.17	0.39	0.56	0.09	0.23	0.77			0.25	0.83

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 92 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 25.5

Intersection LOS: C

Intersection Capacity Utilization 77.2%

ICU Level of Service D

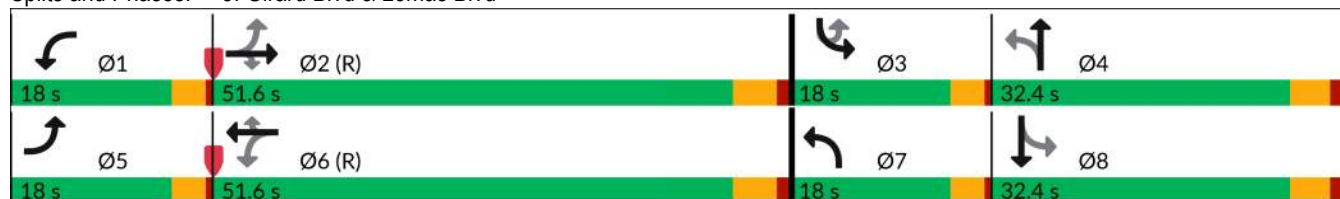
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Girard Blvd & Lomas Blvd





Lane Group	SBR
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	1022	136	139	953	73	71	384	82	416
v/c Ratio	0.37	0.61	0.17	0.50	0.56	0.09	0.34	0.77	0.35	0.83
Control Delay (s/veh)	16.4	27.3	4.2	27.1	6.4	0.2	28.5	50.0	28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.4	27.3	4.2	27.1	6.4	0.2	28.5	50.0	28.3	54.7
Queue Length 50th (ft)	38	319	0	38	50	1	34	256	40	289
Queue Length 95th (ft)	67	417	39	m71	82	m0	66	#417	75	#469
Internal Link Dist (ft)		1437			1894			934		498
Turn Bay Length (ft)	120			120		240	118		128	
Base Capacity (vph)	390	1675	788	356	1715	787	307	497	323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.61	0.17	0.39	0.56	0.09	0.23	0.77	0.25	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	1210	40	25	1170	10	25	5	150	50	5	20
Future Volume (vph)	7	1210	40	25	1170	10	25	5	150	50	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.964	
Flt Protected	0.950			0.950				0.960			0.968	
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	0	1788	1583	0	1738	0
Flt Permitted	0.209			0.202				0.758			0.781	
Satd. Flow (perm)	389	3539	1583	376	3536	0	0	1412	1583	0	1402	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42		1				67		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		666			1331			693			672	
Travel Time (s)		13.0			25.9			15.8			15.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	1260	42	26	1219	10	26	5	156	52	5	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1260	42	26	1229	0	0	31	156	0	78	0
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effect Green (s)	88.3	88.3	88.3	88.3	88.3			11.7	11.7		11.7	
Actuated g/C Ratio	0.80	0.80	0.80	0.80	0.80			0.11	0.11		0.11	
v/c Ratio	0.02	0.44	0.03	0.09	0.43			0.21	0.69		0.48	
Control Delay (s/veh)	2.4	2.7	0.5	2.3	2.3			46.3	41.9		45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.4	2.7	0.5	2.3	2.3			46.3	41.9		45.2	

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A	A	A	A			D	D		D	
Approach Delay (s/veh)		2.7			2.3			42.7			45.2	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	1	60	0	2	47			21	61		41	
Queue Length 95th (ft)	m2	90	m2	m4	78			48	125		85	
Internal Link Dist (ft)		586			1251			613			592	
Turn Bay Length (ft)	85		240	85								
Base Capacity (vph)	312	2842	1279	301	2840			430	528		438	
Starvation Cap Reductn	0	111	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.02	0.46	0.03	0.09	0.43			0.07	0.30		0.18	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 6.3

Intersection LOS: A

Intersection Capacity Utilization 61.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	7	1260	42	26	1229	31	156	78
v/c Ratio	0.02	0.44	0.03	0.09	0.43	0.21	0.69	0.48
Control Delay (s/veh)	2.4	2.7	0.5	2.3	2.3	46.3	41.9	45.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.4	2.7	0.5	2.3	2.3	46.3	41.9	45.2
Queue Length 50th (ft)	1	60	0	2	47	21	61	41
Queue Length 95th (ft)	m2	90	m2	m4	78	48	125	85
Internal Link Dist (ft)		586			1251	613		592
Turn Bay Length (ft)	85		240	85				
Base Capacity (vph)	312	2842	1279	301	2840	430	528	438
Starvation Cap Reductn	0	111	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.46	0.03	0.09	0.43	0.07	0.30	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	1235	30	53	1129	5	36
Future Volume (vph)	1235	30	53	1129	5	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.202		0.950	
Satd. Flow (perm)	3539	1583	376	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		31				30
Link Speed (mph)	35			35	30	
Link Distance (ft)	650			1388	625	
Travel Time (s)	12.7			27.0	14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1286	31	55	1176	5	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1286	31	55	1176	5	38
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	49.2	49.2	49.2	49.2	8.1	8.1
Actuated g/C Ratio	0.88	0.88	0.88	0.88	0.15	0.15
v/c Ratio	0.41	0.02	0.17	0.38	0.02	0.15
Control Delay (s/veh)	2.7	1.2	3.9	2.5	22.6	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.7	1.2	3.9	2.5	22.6	13.3

Lomas Road Diet - Road Diet PM Diverted 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.7			2.6	14.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0	0	0	0	1	2
Queue Length 95th (ft)	125	5	18	108	10	24
Internal Link Dist (ft)	570			1308	545	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3122	1400	331	3122	767	703
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.02	0.17	0.38	0.01	0.05

Intersection Summary

Area Type: Other

Cycle Length: 66

Actuated Cycle Length: 55.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay (s/veh): 2.8

Intersection LOS: A

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

16: Morningside Dr & Lomas Blvd

09/03/2025



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1286	31	55	1176	5	38
v/c Ratio	0.41	0.02	0.17	0.38	0.02	0.15
Control Delay (s/veh)	2.7	1.2	3.9	2.5	22.6	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.7	1.2	3.9	2.5	22.6	13.3
Queue Length 50th (ft)	0	0	0	0	1	2
Queue Length 95th (ft)	125	5	18	108	10	24
Internal Link Dist (ft)	570			1308	545	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3122	1400	331	3122	767	703
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.02	0.17	0.38	0.01	0.05
Intersection Summary						

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	1047	133	151	736	237	124	1315	192	174	1052	177
Future Volume (vph)	261	1047	133	151	736	237	124	1315	192	174	1052	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		500	200		240	250		0	225		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt		0.983				0.850		0.981			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4999	0	1770	3539	1583	1770	4989	0	1770	4973	0
Flt Permitted	0.127			0.136			0.122			0.098		
Satd. Flow (perm)	237	4999	0	253	3539	1583	227	4989	0	183	4973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				247		25			34	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		710			536			649			665	
Travel Time (s)		13.8			9.1			11.1			11.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	1091	139	157	767	247	129	1370	200	181	1096	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	1230	0	157	767	247	129	1570	0	181	1280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6		6	4			8		

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 1

Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6	6	7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0	16.0	3.0	16.0		3.0	16.0	
Minimum Split (s)	9.5	39.5		9.5	38.5	38.5	9.5	36.5		9.5	36.5	
Total Split (s)	19.0	28.6		24.2	33.8	33.8	11.0	38.5		18.7	46.2	
Total Split (%)	17.3%	26.0%		22.0%	30.7%	30.7%	10.0%	35.0%		17.0%	42.0%	
Maximum Green (s)	15.5	23.1		20.7	28.3	28.3	7.5	33.0		15.2	40.7	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5		3.5	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0	4.0	1.5	4.0		1.5	4.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Max		None	Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		27.0			26.0	26.0		24.0			24.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effect Green (s)	48.8	33.7		41.5	29.4	29.4	46.5	37.5		52.7	41.1	
Actuated g/C Ratio	0.44	0.31		0.38	0.27	0.27	0.42	0.34		0.48	0.37	
v/c Ratio	0.89	0.80		0.67	0.81	0.41	0.66	0.92		0.75	0.68	
Control Delay (s/veh)	50.8	38.5		42.8	35.7	4.7	35.7	44.3		39.9	30.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	50.8	38.5		42.8	35.7	4.7	35.7	44.3		39.9	30.4	
LOS	D	D		D	D	A	D	D		D	C	
Approach Delay (s/veh)		40.8			30.1			43.6			31.6	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	140	298		39	282	60	49	379		71	269	
Queue Length 95th (ft)	#278	#395		119	#367	21	#114	#532		145	322	
Internal Link Dist (ft)		630			456			569			585	
Turn Bay Length (ft)	155			200		240	250			225		
Base Capacity (vph)	321	1544		398	945	603	202	1715		308	1880	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.85	0.80		0.39	0.81	0.41	0.64	0.92		0.59	0.68	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 56 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 37.2

Intersection LOS: D

Intersection Capacity Utilization 90.0%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

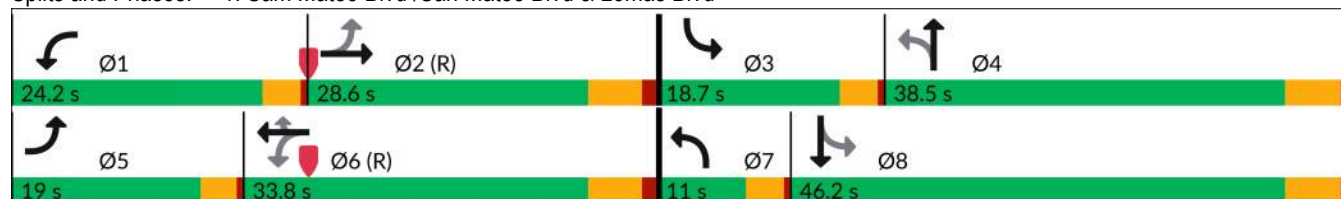
Lanes, Volumes, Timings

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025

Queue shown is maximum after two cycles.

Splits and Phases: 1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd



Queues

1: Sam Mateo Blvd /San Mateo Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	272	1230	157	767	247	129	1570	181	1280
v/c Ratio	0.89	0.80	0.67	0.81	0.41	0.66	0.92	0.75	0.68
Control Delay (s/veh)	50.8	38.5	42.8	35.7	4.7	35.7	44.3	39.9	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.8	38.5	42.8	35.7	4.7	35.7	44.3	39.9	30.4
Queue Length 50th (ft)	140	298	39	282	60	49	379	71	269
Queue Length 95th (ft)	#278	#395	119	#367	21	#114	#532	145	322
Internal Link Dist (ft)		630		456			569		585
Turn Bay Length (ft)	155		200		240	250		225	
Base Capacity (vph)	321	1544	398	945	603	202	1715	308	1880
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.80	0.39	0.81	0.41	0.64	0.92	0.59	0.68

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	1095	67	119	832	89	157	481	274	171	412	118
Future Volume (vph)	185	1095	67	119	832	89	157	481	274	171	412	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		240	175		0	135		250	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3422	0
Flt Permitted	0.229			0.140			0.190			0.264		
Satd. Flow (perm)	427	3539	1583	261	3539	1583	354	3539	1583	492	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			139			238		32	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		2063			2631			468			660	
Travel Time (s)		35.2			44.8			9.1			12.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	1141	70	124	867	93	164	501	285	178	429	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	193	1141	70	124	867	93	164	501	285	178	552	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4		4	8		

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report

Page 5

Lanes, Volumes, Timings

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	16.0		3.0	8.0	8.0	3.0	8.0	
Minimum Split (s)	9.5	30.0		9.5	28.0		9.5	36.0	36.0	9.5	34.0	
Total Split (s)	13.2	44.0		16.5	47.3		16.5	35.2	35.2	14.3	33.0	
Total Split (%)	12.0%	40.0%		15.0%	43.0%		15.0%	32.0%	32.0%	13.0%	30.0%	
Maximum Green (s)	9.7	39.0		13.0	42.3		13.0	30.2	30.2	10.8	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		0.5	1.0	1.0	0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	4.0		1.5	4.0		1.5	2.0	2.0	1.5	2.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		18.0			16.0			24.0	24.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	63.1	52.7	0.0	61.1	51.7	0.0	34.6	22.2	22.2	33.2	21.5	
Actuated g/C Ratio	0.57	0.48	0.00	0.56	0.47	0.00	0.31	0.20	0.20	0.30	0.20	
v/c Ratio	0.55	0.67	0.50	0.49	0.52	0.67	0.65	0.70	0.56	0.67	0.80	
Control Delay (s/veh)	13.3	18.7	21.2	18.0	23.5	25.9	37.8	45.8	12.0	38.5	48.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	13.3	18.7	21.2	18.0	23.5	25.9	37.8	45.8	12.0	38.5	48.3	
LOS	B	B	C	B	C	C	D	D	B	D	D	
Approach Delay (s/veh)		18.1			23.0			34.3			45.9	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	20	401	15	36	222	0	83	175	28	91	186	
Queue Length 95th (ft)	m45	m#517	m29	75	327	#40	122	212	99	132	232	
Internal Link Dist (ft)		1983			2551			388			580	
Turn Bay Length (ft)	100		240	175			135		250	100		
Base Capacity (vph)	372	1694	139	332	1662	139	284	971	607	276	894	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.52	0.67	0.50	0.37	0.52	0.67	0.58	0.52	0.47	0.64	0.62	
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 1 (1%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green												
Natural Cycle: 85												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.80												
Intersection Signal Delay (s/veh): 27.9	Intersection LOS: C											
Intersection Capacity Utilization 75.7%	ICU Level of Service D											
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												

Lanes, Volumes, Timings

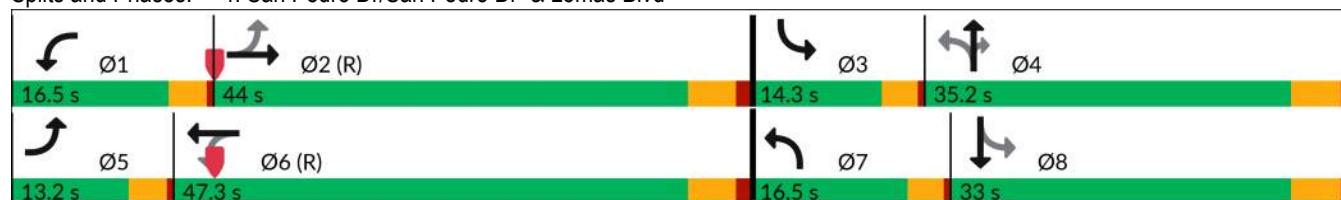
4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: San Pedro Dr/San Pedro Dr & Lomas Blvd



Queues

4: San Pedro Dr/San Pedro Dr & Lomas Blvd

09/03/2025

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	193	1141	70	124	867	93	164	501	285	178	552
v/c Ratio	0.55	0.67	0.50	0.49	0.52	0.67	0.65	0.70	0.56	0.67	0.80
Control Delay (s/veh)	13.3	18.7	21.2	18.0	23.5	25.9	37.8	45.8	12.0	38.5	48.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.3	18.7	21.2	18.0	23.5	25.9	37.8	45.8	12.0	38.5	48.3
Queue Length 50th (ft)	20	401	15	36	222	0	83	175	28	91	186
Queue Length 95th (ft)	m45	m#517	m29	75	327	#40	122	212	99	132	232
Internal Link Dist (ft)	1983			2551			388			580	
Turn Bay Length (ft)	100		240	175			135		250	100	
Base Capacity (vph)	372	1694	139	332	1662	139	284	971	607	276	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.67	0.50	0.37	0.52	0.67	0.58	0.52	0.47	0.64	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Future Volume (vph)	3	69	1055	74	85	1013	59	57	179	87	55	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		113		240	145		240	120		0	90	
Storage Lanes		1		1	1		0	1		0	1	
Taper Length (ft)		25			25			25			25	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.98		1.00		1.00	0.99		1.00	1.00
Frt				0.850		0.992			0.951			0.979
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1805	3610	1615	1805	3577	0	1805	1793	0	1805	1855
Flt Permitted		0.222			0.227			0.253			0.287	
Satd. Flow (perm)	0	422	3610	1580	431	3577	0	479	1793	0	545	1855
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				77		10			23			8
Link Speed (mph)			35			35			30			30
Link Distance (ft)			1388			666			633			385
Travel Time (s)			27.0			13.0			14.4			8.8
Confl. Peds. (#/hr)								4		4	2	
Confl. Bikes (#/hr)				3			1			8		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	72	1099	77	89	1055	61	59	186	91	57	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	1099	77	89	1116	0	59	277	0	57	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			12			12			12
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2	1	1	2		1	1		1	1
Detector Template	Left	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	20	100	20	20	100		37	37		36	36
Trailing Detector (ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		2	2		0	0
Detector 1 Size(ft)	20	20	6	20	20	6		35	35		36	36
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94						
Detector 2 Size(ft)			6			6						
Detector 2 Type			Cl+Ex			Cl+Ex						
Detector 2 Channel												

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	39
Future Volume (vph)	39
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	5
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	41
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lanes, Volumes, Timings
6: Washington St & Lomas Blvd

09/03/2025

												
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0						
Turn Type	Perm	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2			4			4	
Detector Phase	2	2	2	2	2	2		4	4		4	4
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (s)	71.5	71.5	71.5	71.5	71.5	71.5		38.5	38.5		38.5	38.5
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%		35.0%	35.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5		33.5	33.5		33.5	33.5
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	4.0		2.0	2.0		2.0	2.0
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0		8.0	8.0
Flash Don't Walk (s)	18.0	18.0	18.0	18.0	18.0	18.0		18.0	18.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0	0		0	0
Act Effect Green (s)		78.4	78.4	78.4	78.4	78.4		21.6	21.6		21.6	21.6
Actuated g/C Ratio		0.71	0.71	0.71	0.71	0.71		0.20	0.20		0.20	0.20
v/c Ratio		0.25	0.43	0.07	0.29	0.44		0.63	0.75		0.54	0.79
Control Delay (s/veh)		9.6	7.8	1.7	5.7	3.8		67.8	50.1		56.5	55.7
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		9.6	7.8	1.7	5.7	3.8		67.8	50.1		56.5	55.7
LOS		A	A	A	A	A		E	D		E	E
Approach Delay (s/veh)			7.5			4.0			53.2			55.8
Approach LOS			A			A			D			E
Queue Length 50th (ft)		16	147	0	9	59		39	171		37	194
Queue Length 95th (ft)		49	240	16	14	58		81	242		75	265
Internal Link Dist (ft)			1308			586			553			305
Turn Bay Length (ft)		113		240	145			120			90	
Base Capacity (vph)		300	2572	1147	307	2551		145	562		165	570
Starvation Cap Reductn		0	0	0	0	0		0	0		0	0
Spillback Cap Reductn		0	0	0	0	0		0	0		0	0
Storage Cap Reductn		0	0	0	0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.43	0.07	0.29	0.44		0.41	0.49		0.35	0.51
Intersection Summary												
Area Type:	Other											
Cycle Length: 110												
Actuated Cycle Length: 110												
Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 110												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.79												



Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 6: Washington St & Lomas Blvd

09/03/2025

Intersection Signal Delay (s/veh): 16.4
Intersection Capacity Utilization 82.3%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service E

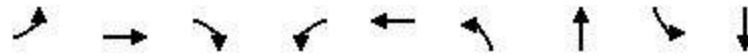
Splits and Phases: 6: Washington St & Lomas Blvd



Queues

6: Washington St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	75	1099	77	89	1116	59	277	57	293
v/c Ratio	0.25	0.43	0.07	0.29	0.44	0.63	0.75	0.54	0.79
Control Delay (s/veh)	9.6	7.8	1.7	5.7	3.8	67.8	50.1	56.5	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.6	7.8	1.7	5.7	3.8	67.8	50.1	56.5	55.7
Queue Length 50th (ft)	16	147	0	9	59	39	171	37	194
Queue Length 95th (ft)	49	240	16	14	58	81	242	75	265
Internal Link Dist (ft)		1308			586		553		305
Turn Bay Length (ft)	113		240	145		120		90	
Base Capacity (vph)	300	2572	1147	307	2551	145	562	165	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.43	0.07	0.29	0.44	0.41	0.49	0.35	0.51
Intersection Summary									

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Future Volume (vph)	137	909	44	20	107	850	92	41	263	31	117	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		240		100		240	112		0	130	
Storage Lanes	1		0		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00	1.00		0.99	1.00		0.99	
Frt		0.993				0.985			0.984			
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1805	5145	0	0	1805	5094	0	1805	1866	0	1805	1900
Flt Permitted	0.136				0.135			0.950			0.950	
Satd. Flow (perm)	258	5145	0	0	256	5094	0	1787	1866	0	1786	1900
Right Turn on Red							Yes			Yes		
Satd. Flow (RTOR)						14			4			
Link Speed (mph)		35				35			30			30
Link Distance (ft)		678				662			1176			634
Travel Time (s)		13.2				12.9			26.7			14.4
Confl. Peds. (#/hr)	1		1	4	4		4	4		4	7	
Confl. Bikes (#/hr)			1				1					
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	143	947	46	21	111	885	96	43	274	32	122	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	993	0	0	132	981	0	43	306	0	122	246
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	15		9	15		9	15	
Number of Detectors	1	1		1	1	1		1	1		1	1
Detector Template	Left	Thru		Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	36	100		20	20	100		20	25		35	40
Trailing Detector (ft)	1	0		10	0	0		15	35		10	10
Detector 1 Position(ft)	1	0		10	0	0		15	35		10	10
Detector 1 Size(ft)	35	100		10	20	100		5	-10		25	30
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases	5	2		1	1	6		8	8		4	4
Permitted Phases	2			6	6							
Detector Phase	5	2		1	1	6		8	8		4	4

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	147	125	174	138
Future Volume (vph)	147	125	174	138
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	115		0	170
Storage Lanes	2		1	2
Taper Length (ft)			25	
Lane Util. Factor	1.00	1.00	1.00	0.88
Ped Bike Factor				
Frt	0.850	0.850		0.850
Flt Protected			0.950	
Satd. Flow (prot)	1615	1615	1805	2842
Flt Permitted			0.950	
Satd. Flow (perm)	1615	1615	1805	2842
Right Turn on Red		Yes		
Satd. Flow (RTOR)		130		
Link Speed (mph)			35	
Link Distance (ft)			350	
Travel Time (s)			6.8	
Confl. Peds. (#/hr)	7	7		
Confl. Bikes (#/hr)	1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%
Adj. Flow (vph)	153	130	181	144
Shared Lane Traffic (%)				
Lane Group Flow (vph)	153	130	181	144
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Right	Right	Left	Right
Median Width(ft)			12	
Link Offset(ft)			0	
Crosswalk Width(ft)			16	
Two way Left Turn Lane				
Headway Factor	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	9	15	9
Number of Detectors	1	1	1	1
Detector Template	Right	Right	Left	Right
Leading Detector (ft)	40	40	20	20
Trailing Detector (ft)	10	10	0	0
Detector 1 Position(ft)	10	10	0	0
Detector 1 Size(ft)	30	30	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel				
Detector 1 Extend (s)	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0
Turn Type	pt+ov	custom	Prot	Prot
Protected Phases	3 4	3 4	3	3
Permitted Phases				
Detector Phase	3 4	3 4	3	3

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0		3.0	3.0	16.0		8.0	8.0		8.0	8.0
Minimum Split (s)	18.0	31.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (s)	18.0	30.0		18.0	18.0	30.0		24.0	24.0		24.0	24.0
Total Split (%)	15.0%	25.0%		15.0%	15.0%	25.0%		20.0%	20.0%		20.0%	20.0%
Maximum Green (s)	14.5	24.0		14.5	14.5	24.5		18.5	18.5		18.5	18.5
Yellow Time (s)	3.0	4.0		3.0	3.0	3.5		3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	2.0		0.5	0.5	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	3.5	6.0			3.5	5.5		5.5	5.5		5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lead	Lag					Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	1.5	3.0		2.0	2.0		2.0	2.0
Recall Mode	None	C-Max		None	None	Max		None	None		None	None
Walk Time (s)		7.0				7.0		7.0	7.0		0.0	0.0
Flash Don't Walk (s)		18.0				21.0		25.0	25.0		0.0	0.0
Pedestrian Calls (#/hr)		0				0		0	0		0	0
Act Effct Green (s)	42.6	29.6			41.6	29.6		21.7	21.7		18.2	18.2
Actuated g/C Ratio	0.36	0.25			0.35	0.25		0.18	0.18		0.15	0.15
v/c Ratio	0.64	0.78			0.61	0.77		0.13	0.90		0.45	0.86
Control Delay (s/veh)	30.1	34.0			38.0	47.1		44.6	77.9		51.7	76.5
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)	30.1	34.0			38.0	47.1		44.6	77.9		51.7	76.5
LOS	C	C			D	D		D	E		D	E
Approach Delay (s/veh)		33.5				46.0			73.8			46.8
Approach LOS		C				D			E			D
Queue Length 50th (ft)	33	275			69	259		29	237		85	183
Queue Length 95th (ft)	m81	#372			116	#358		64	#440		149	#325
Internal Link Dist (ft)		598				582			1096			554
Turn Bay Length (ft)	95				100			112			130	
Base Capacity (vph)	283	1269			282	1268		326	340		287	302
Starvation Cap Reductn	0	0			0	0		0	0		0	0
Spillback Cap Reductn	0	0			0	0		0	0		0	0
Storage Cap Reductn	0	0			0	0		0	0		0	0
Reduced v/c Ratio	0.51	0.78			0.47	0.77		0.13	0.90		0.43	0.81

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 42 (35%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 46.4

Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025



Lane Group	SBR	SBR2	NEL	NER
Switch Phase				
Minimum Initial (s)			8.0	8.0
Minimum Split (s)			22.0	22.0
Total Split (s)			24.0	24.0
Total Split (%)			20.0%	20.0%
Maximum Green (s)			19.5	19.5
Yellow Time (s)			3.5	3.5
All-Red Time (s)			1.0	1.0
Lost Time Adjust (s)			0.0	0.0
Total Lost Time (s)			4.5	4.5
Lead/Lag			Lead	Lead
Lead-Lag Optimize?			Yes	Yes
Vehicle Extension (s)			2.0	2.0
Recall Mode			None	None
Walk Time (s)				
Flash Don't Walk (s)				
Pedestrian Calls (#/hr)				
Act Effect Green (s)	39.3	39.3	15.6	15.6
Actuated g/C Ratio	0.33	0.33	0.13	0.13
v/c Ratio	0.29	0.21	0.77	0.39
Control Delay (s/veh)	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.5	5.2	71.6	50.1
LOS	C	A	E	D
Approach Delay (s/veh)			62.1	
Approach LOS			E	
Queue Length 50th (ft)	84	0	137	58
Queue Length 95th (ft)	137	41	210	92
Internal Link Dist (ft)			270	
Turn Bay Length (ft)	115	115		170
Base Capacity (vph)	528	615	293	461
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.21	0.62	0.31
Intersection Summary				

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

 Ø1 18 s	 Ø2 (R) 30 s	 Ø3 24 s	 Ø4 24 s	 Ø8 24 s
 Ø5 18 s	 Ø6 30 s			

Queues

7: Monte Vista Blvd & Carlisle Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR	SBR2	NEL	NER
Lane Group Flow (vph)	143	993	132	981	43	306	122	246	153	130	181	144
v/c Ratio	0.64	0.78	0.61	0.77	0.13	0.90	0.45	0.86	0.29	0.21	0.77	0.39
Control Delay (s/veh)	30.1	34.0	38.0	47.1	44.6	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.1	34.0	38.0	47.1	44.6	77.9	51.7	76.5	30.5	5.2	71.6	50.1
Queue Length 50th (ft)	33	275	69	259	29	237	85	183	84	0	137	58
Queue Length 95th (ft)	m81	#372	116	#358	64	#440	149	#325	137	41	210	92
Internal Link Dist (ft)		598		582		1096		554			270	
Turn Bay Length (ft)	95		100		112		130		115	115		170
Base Capacity (vph)	283	1269	282	1268	326	340	287	302	528	615	293	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.78	0.47	0.77	0.13	0.90	0.43	0.81	0.29	0.21	0.62	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Future Volume (vph)	104	896	131	133	825	70	68	238	131	1	78	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	120		240	118		0		128	
Storage Lanes	1		1	1		1	1		0		1	
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95	1.00		0.97	1.00	0.99			0.99	0.99
Frt			0.850			0.850		0.947				0.961
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	1805	3610	1615	1805	3610	1615	1805	1787	0	0	1805	1811
Flt Permitted	0.238			0.195			0.193				0.232	
Satd. Flow (perm)	450	3610	1542	370	3610	1561	366	1787	0	0	436	1811
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)			136			86		21				13
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1517			1974			1014				578
Travel Time (s)		29.6			38.5			23.0				13.1
Confl. Peds. (#/hr)	10		10	5		5	2		2	11	11	
Confl. Bikes (#/hr)			2			1			6			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	108	933	136	139	859	73	71	248	136	1	81	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	933	136	139	859	73	71	384	0	0	82	416
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	0	1	1	0	1	1	1		1	1	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Left	Thru
Leading Detector (ft)	36	0	20	36	0	20	36	36		20	36	36
Trailing Detector (ft)	3	0	0	2	0	0	1	1		0	3	3
Detector 1 Position(ft)	3	0	0	2	0	0	1	1		0	3	3
Detector 1 Size(ft)	33	6	20	34	6	20	35	35		20	33	33
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		custom	pm+pt	NA
Protected Phases	5	2		1	6		7	4			3	8
Permitted Phases	2		2	6		6	4			3	8	
Detector Phase	5	2	2	1	6	6	7	4		3	3	8

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	103
Future Volume (vph)	103
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	11
Confl. Bikes (#/hr)	8
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	107
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	

Lanes, Volumes, Timings
8: Girard Blvd & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Switch Phase												
Minimum Initial (s)	3.0	16.0	16.0	3.0	16.0	16.0	3.0	8.0		3.0	3.0	8.0
Minimum Split (s)	18.0	51.6	51.6	18.0	51.6	51.6	18.0	38.5		18.0	18.0	37.5
Total Split (s)	18.0	51.6	51.6	18.0	51.6	51.6	18.0	32.4		18.0	18.0	32.4
Total Split (%)	15.0%	43.0%	43.0%	15.0%	43.0%	43.0%	15.0%	27.0%		15.0%	15.0%	27.0%
Maximum Green (s)	14.5	46.6	46.6	14.5	46.6	46.6	14.5	26.9		14.5	14.5	26.9
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.0	3.0	3.5
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	1.0	0.5	2.0		0.5	0.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.5			3.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0		1.5	1.5	2.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0				7.0
Flash Don't Walk (s)		18.0	18.0		17.0	17.0		26.0				25.0
Pedestrian Calls (#/hr)		0	0		0	0		0				0
Act Effect Green (s)	64.6	55.9	55.9	66.9	57.0	57.0	40.5	32.4			41.3	32.8
Actuated g/C Ratio	0.54	0.47	0.47	0.56	0.48	0.48	0.34	0.27			0.34	0.27
v/c Ratio	0.33	0.56	0.17	0.45	0.50	0.09	0.34	0.77			0.35	0.83
Control Delay (s/veh)	15.5	25.9	4.1	19.5	5.4	0.2	28.5	50.0			28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	15.5	25.9	4.1	19.5	5.4	0.2	28.5	50.0			28.3	54.7
LOS	B	C	A	B	A	A	C	D			C	D
Approach Delay (s/veh)		22.4			6.8			46.6				50.4
Approach LOS		C			A			D				D
Queue Length 50th (ft)	38	282	0	31	44	1	34	256			40	289
Queue Length 95th (ft)	67	366	38	m66	46	m0	66	#417			75	#469
Internal Link Dist (ft)		1437			1894			934				498
Turn Bay Length (ft)	120			120		240	118				128	
Base Capacity (vph)	423	1681	790	387	1715	787	307	497			323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0			0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0			0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0			0	0
Reduced v/c Ratio	0.26	0.56	0.17	0.36	0.50	0.09	0.23	0.77			0.25	0.83

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 92 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 25.0

Intersection LOS: C

Intersection Capacity Utilization 74.9%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



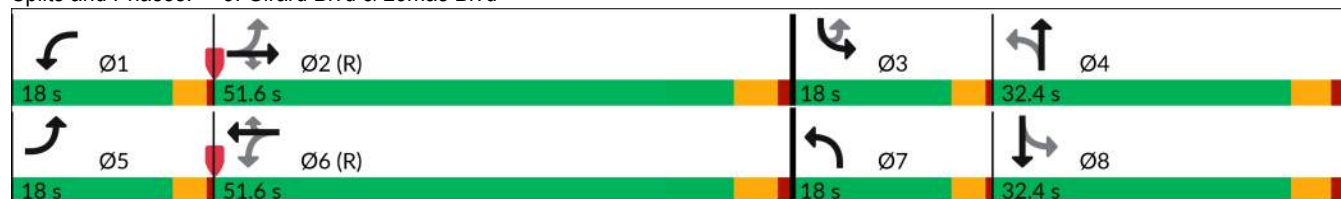
Lane Group	SBR
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 8: Girard Blvd & Lomas Blvd

09/03/2025

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Girard Blvd & Lomas Blvd



Queues

8: Girard Blvd & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	933	136	139	859	73	71	384	82	416
v/c Ratio	0.33	0.56	0.17	0.45	0.50	0.09	0.34	0.77	0.35	0.83
Control Delay (s/veh)	15.5	25.9	4.1	19.5	5.4	0.2	28.5	50.0	28.3	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.5	25.9	4.1	19.5	5.4	0.2	28.5	50.0	28.3	54.7
Queue Length 50th (ft)	38	282	0	31	44	1	34	256	40	289
Queue Length 95th (ft)	67	366	38	m66	46	m0	66	#417	75	#469
Internal Link Dist (ft)		1437			1894			934		498
Turn Bay Length (ft)	120			120		240	118		128	
Base Capacity (vph)	423	1681	790	387	1715	787	307	497	323	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.56	0.17	0.36	0.50	0.09	0.23	0.77	0.25	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	1150	40	25	1100	10	25	5	150	50	5	20
Future Volume (vph)	7	1150	40	25	1100	10	25	5	150	50	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	85		240	85		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	90			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.964	
Flt Protected	0.950			0.950				0.960			0.968	
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	0	1788	1583	0	1738	0
Flt Permitted	0.229			0.218				0.751			0.781	
Satd. Flow (perm)	427	3539	1583	406	3536	0	0	1399	1583	0	1402	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42		1				78		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		666			1324			693			672	
Travel Time (s)		13.0			25.8			15.8			15.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	1198	42	26	1146	10	26	5	156	52	5	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1198	42	26	1156	0	0	31	156	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2			4		4	4		

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2	2	2	2		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0	16.0		8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Total Split (s)	71.5	71.5	71.5	71.5	71.5		38.5	38.5	38.5	38.5	38.5	
Total Split (%)	65.0%	65.0%	65.0%	65.0%	65.0%		35.0%	35.0%	35.0%	35.0%	35.0%	
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5		33.5	33.5	33.5	33.5	33.5	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5		2.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0		17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0	0	0	0	
Act Effect Green (s)	88.8	88.8	88.8	88.8	88.8			11.2	11.2		11.2	
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.81			0.10	0.10		0.10	
v/c Ratio	0.02	0.42	0.03	0.08	0.40			0.22	0.68		0.50	
Control Delay (s/veh)	2.3	2.6	0.4	2.2	2.1			47.3	38.7		46.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.3	2.6	0.4	2.2	2.1			47.3	38.7		46.7	
LOS	A	A	A	A	A			D	D		D	
Approach Delay (s/veh)		2.5			2.1			40.1			46.7	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	1	51	0	2	41			21	54		42	
Queue Length 95th (ft)	m2	84	m2	m4	72			48	117		86	
Internal Link Dist (ft)		586			1244			613			592	
Turn Bay Length (ft)	85		240	85								
Base Capacity (vph)	344	2857	1286	327	2855			426	536		438	
Starvation Cap Reductn	0	177	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.02	0.45	0.03	0.08	0.40			0.07	0.29		0.18	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay (s/veh): 6.2

Intersection LOS: A

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
10: Monroe St & Lomas Blvd

09/03/2025

Splits and Phases: 10: Monroe St & Lomas Blvd



Queues

10: Monroe St & Lomas Blvd

09/03/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	7	1198	42	26	1156	31	156	78
v/c Ratio	0.02	0.42	0.03	0.08	0.40	0.22	0.68	0.50
Control Delay (s/veh)	2.3	2.6	0.4	2.2	2.1	47.3	38.7	46.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.3	2.6	0.4	2.2	2.1	47.3	38.7	46.7
Queue Length 50th (ft)	1	51	0	2	41	21	54	42
Queue Length 95th (ft)	m2	84	m2	m4	72	48	117	86
Internal Link Dist (ft)		586			1244	613		592
Turn Bay Length (ft)	85		240	85				
Base Capacity (vph)	344	2857	1286	327	2855	426	536	438
Starvation Cap Reductn	0	177	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.45	0.03	0.08	0.40	0.07	0.29	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

09/03/2025

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	1165	30	53	1059	5	36
Future Volume (vph)	1165	30	53	1059	5	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		240	50		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted			0.221		0.950	
Satd. Flow (perm)	3539	1583	412	3539	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		31				37
Link Speed (mph)	35			35	30	
Link Distance (ft)	640			1388	625	
Travel Time (s)	12.5			27.0	14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1214	31	55	1103	5	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1214	31	55	1103	5	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (ft)	100	20	20	100	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	6	20	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases		2	2			4

Lomas Road Diet - Road Diet PM 4:30 pm 05/20/2024 Baseline

Synchro 12 Report
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Lanes, Volumes, Timings
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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	2	2	4	4
Switch Phase						
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	23.0	23.0	23.0	23.0	35.0	35.0
Total Split (s)	37.0	37.0	37.0	37.0	29.0	29.0
Total Split (%)	56.1%	56.1%	56.1%	56.1%	43.9%	43.9%
Maximum Green (s)	32.0	32.0	32.0	32.0	24.0	24.0
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	23.0	23.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	49.2	49.2	49.2	49.2	8.1	8.1
Actuated g/C Ratio	0.88	0.88	0.88	0.88	0.15	0.15
v/c Ratio	0.39	0.02	0.15	0.35	0.02	0.15
Control Delay (s/veh)	2.6	1.2	3.6	2.4	22.6	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.6	1.2	3.6	2.4	22.6	11.0
LOS	A	A	A	A	C	B
Approach Delay (s/veh)	2.5			2.5	12.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	0	0	0	0	1	0
Queue Length 95th (ft)	114	5	17	99	10	22
Internal Link Dist (ft)	560			1308	545	
Turn Bay Length (ft)		240	50			
Base Capacity (vph)	3122	1400	363	3122	767	707
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.02	0.15	0.35	0.01	0.05

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	55.8
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.39
Intersection Signal Delay (s/veh):	2.7
Intersection Capacity Utilization:	58.0%
Analysis Period (min):	15
Intersection LOS:	A
ICU Level of Service:	B

Lanes, Volumes, Timings
16: Morningside Dr & Lomas Blvd

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Splits and Phases: 16: Morningside Dr & Lomas Blvd



Queues

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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1214	31	55	1103	5	38
v/c Ratio	0.39	0.02	0.15	0.35	0.02	0.15
Control Delay (s/veh)	2.6	1.2	3.6	2.4	22.6	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.6	1.2	3.6	2.4	22.6	11.0
Queue Length 50th (ft)	0	0	0	0	1	0
Queue Length 95th (ft)	114	5	17	99	10	22
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Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.02	0.15	0.35	0.01	0.05
Intersection Summary						