

Andalucia, Tract 6
(Montano Rd. / Coors Blvd.)

Traffic Impact Study UPDATE

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D R A F T

Presented to:

City of Albuquerque
Transportation Development Section
&
New Mexico Department of Transportation
District 3

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Andalucia, Tract 6 Development TRAFFIC IMPACT STUDY (UPDATE)

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Andalucia, Tract 6 Development TRAFFIC IMPACT STUDY (UPDATE)

STUDY PURPOSE

The study is being conducted as an update to the former Traffic Impact Study entitled Montano Shoppes / Andalucia, Tract 6 (Montano Rd. / Coors Blvd.) Traffic Impact Study dated June 1, 2007. The former approved study was associated with development plans proposing two new commercial centers including the Andalucia, Tract 6 project as shown conceptually in the Appendix (Pages A-81) of this report. The approved Andalucia, Tract 6 plan is proposed to be amended to implement the current proposed plan as shown on Page A-3 in the Appendix of this report. The purpose of this study is to re-evaluate the impact of the current proposed development on the adjacent transportation system, and to make recommendations to mitigate any significant adverse impact on the adjacent transportation system resulting from the implementation of the site development plan. This study is being prepared to meet the requirements of the City of Albuquerque Transportation Development Section and the New Mexico Department of Transportation, District 3 Office.

STUDY PROCEDURES

A scoping meeting was held with City of Albuquerque staff including the City Engineer, the traffic engineer, prior to beginning the study to discuss scope and methodology to be utilized within the report. Specific items included format, intersections to be studied, intersection analysis procedures, existing traffic counts, trip distribution methodology, and implementation year definition. In reviewing the generated trips for the center a more conservative approach was used to separate the proposed Wal-Mart store into its components of grocery and discount, which resulted in more trips being generated than the stand alone store. Bosque School was considered as existing back ground traffic in the analysis.

The basic procedure followed is described as follows:

- 1) Calculate the generated trips for the proposed development consisting of the following described lane uses:
 - *An approximately 40,000 S.F. Supermarket**
 - *An approximately 59,000 S.F. Free-standing Discount Store**
NOTE: The Supermarket floor space and the Free-standing Discount Store floor space combined constitute the Walmart Store. These two land use categories were utilized in the determination of the trip generation rates for the project to provide a conservatively high trip generation rate. This trip generation calculation method results in a 25% or higher trip generation rate than a Supercenter Trip Generation Rate would yield.
 - *Approximately 69,700 S.F. of general in line retail commercial building floor space*
 - *A Drive-In Bank (3 Drive-In Windows).*

- *High Turnover Sit-Down Restaurants (Approximately 25,100 S.F for three different facilities.)*
 - *A 345 unit Apartment Complex*
- 2) Analysis included in this Traffic Impact Study will consist of considering an implementation year of 2015 (full **build** out of the center will be accomplished over that time period).
 - 3) Calculate trip distribution for the newly generated trips by these developments. The new commercial trips will be distributed based on year 2015 population within a two (2) mile radius boundary of the proposed site as shown on Page A-16 in the Appendix of this report. In addition, an adjusted boundary was used for the proposed Walmart store based on locations of other adjacent Walmart stores. The new residential trips will be distributed based on year 2015 employment citywide inversely proportional to the distance of the employment subarea from the proposed project location.
 - 4) Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution Analysis and logical routing to and from the site (See Pages A-16 thru A-38 in the Appendix of this report).
 - 5) Acquire a recent traffic count for the intersection of Montano Rd. / Coors Blvd.
 - 6) Perform new traffic counts (turning movement counts) for the intersections of Dellyne Ave. / Coors Blvd., Montano Rd. / 4th St and Montano Rd. / Winterhaven Rd.
 - 7) A 1.2% growth rate was used in this study based on Traffic Flow data and recent traffic count data in the area based upon the historic traffic growth in the area.
 - 8) Determine 2015 NO BUILD Volumes by growing the existing turning movement counts to the year 2015 utilizing the appropriate annual historic growth rate for the area. Additionally, the trips generated by the U. S. New Mexico Credit Union project at Learning Rd. / Coors Blvd. were added in to the 2015 background volumes in this study.
 - 9) Add in data from Trip Assignments Maps and Tables to the 2015 NO BUILD Volumes to obtain 2015 BUILD Volumes for this project.
 - 10) Provide signalized and / or unsignalized intersection analyses for the following intersections:

INTERSECTION	TYPE CONTROL	NO BUILD	BUILD
3) Montano Rd. / Coors Blvd.	Traffic Signal	2015	2015
4) Dellyne Ave. / Coors Blvd.	Traffic Signal	2015	2015
7) Montano Rd. / 4 th St.	Traffic Signal	2015	2015
8) Montano Rd. / Winterhaven Rd.	Stop Sign	2015	2015
9) Montano Rd. / Antequera Rd	Stop Sign	N/A	2015
10) E-W Street / Coors Blvd.	Stop Sign	N/A	2015
11) Mirandela St / Coors Blvd.	Stop Sign	N/A	2015

PREVIOUS RELATED TRAFFIC IMPACT STUDIES

Included in the background traffic volumes for this project are the trips generated by the following previous Traffic Impact Study:

- 1) *U. S. New Mexico Credit Union at Dellyne Ave / Coors Blvd*

The Implementation Year Trips Generated Volumes from those reports were added into the 2015 Background Subtotal Volumes in this report to obtain the 2015 NO BUILD Volumes. The proposed U. S. New Mexico Credit Union project is being developed on a parcel of land that was included in the 2007 Traffic Impact Study for the Montano Shoppes / Andalucia, Tract 6 project. The Credit Union tract is located on the south end of the Andalucia project. This study considers the Credit Union trips as included in the 2015 background traffic volumes.

GENERAL AREA CHARACTERISTICS

The proposed requested site development plan is at the southeast corner of Montano Rd. / Coors Blvd. as shown on the Vicinity Map on Page A-1 of the Appendix of this report. Properties surrounding this site are a mix of commercial, school, and residential uses. The property to the east of Andalucia, Tract 6 is the existing Bosque Prep Private School. The proposed ABCWA (Albuquerque Bernalillo County Water Authority) treatment plan will generate nominal maintenance traffic and was considered to be included in the annual background traffic growth increases. Most of the land surrounding this site to the north and west is substantially developed or being developed. The property to the south is being developed into apartments and the school will have more expansion plans to the east of the site. In conversations with the property owner, the apartments should break ground for development this year. More detailed zoning information may be obtained upon inspection of the Vicinity Maps on Page A-1 and A-2 in the Appendix.

AREA STREET NETWORK

Coors Boulevard is classified as a Principal Arterial roadway south of Alameda Blvd. on the Long Range Roadway System for the Albuquerque Urban Area. It is generally a six lane paved urban roadway with curbs and gutters on both sides of the roadway and raised medians in the center. There is a paved shoulder and bicycle lanes on each side of Coors Blvd.

Montano Road is classified as a Limited Access Minor Arterial Roadway on the Long Range Roadway System for the Albuquerque Urban Area. It is a four lane paved urban section roadway with curbs and gutters on both side of the street and a raised median. The posted speed limit on Montano Rd. from Taylor Ranch Rd. to Coors Blvd. is 40 MPH.

Dellyne Ave. is classified as a Collector Street on the Long Range Roadway System for the Albuquerque Metropolitan Area. It is currently a two lane paved facility west of Coors Blvd.

4th St. from Central Ave. to Alameda Blvd. is classified as a Minor Arterial Roadway on the Long Range Roadway System for the Albuquerque Metropolitan Area. It is currently a four lane urban roadway with curbs and gutters on both sides of the street and raised medians.

EXISTING TRAFFIC VOLUMES

2010 Average Weekday Traffic Volumes (AWDT) for major streets in the site plan area are shown on Page A-5 of the Appendix.

Current turning movement volumes obtained during the AM and PM Peak Hours for this project were acquired from recent field counts conducted by the consulting engineer.

Existing AM and PM Peak Hour turning movement counts were provided by the City of Albuquerque for the following intersections:

Montano Rd. / Coors Blvd. (2010)

Additionally, AM and PM Peak Hour turning movement counts for 2011 were obtained by field traffic counts taken for the following intersections:

Dellyne Ave. (Learning Rd.) / Coors Blvd. (2011)

Montano Rd. / 4th St. (2011)

Montano Rd. / Winterhaven Rd. (2011)

EXISTING (2011) LEVELS OF SERVICE

The Highway Capacity Manual defines Level of Service (LOS) for signalized intersections in terms of average controlled delay per vehicle as follows:

LOS A	10.0" or less	Most Vehicles do not stop
LOS B	10.1 to 20.0"	Some Vehicles stop
LOS C	20.1 to 35.0"	Significant number of vehicles stop
LOS D	35.1 to 55.0"	Many vehicles stop.
LOS E	55.1 to 80.0"	Limit of acceptable delay.
LOS F	> 80.0"	Increased delay with multiple cycle waits .

Level of Service D is generally considered acceptable in urban areas and is the desirable base condition for analysis in a traffic study. In addition to consideration of the overall level-of-service of the signalized intersection, the levels-of-service of each individual movement should be considered.

The existing levels-of-service were not calculated for this report. An approximation of the existing levels of service can be acquired from the 2015 NO BUILD levels-of-service since the annual growth rates in this area are so low.

PROPOSED DEVELOPMENT

The proposed location is at the southeast corner of the existing signalized intersection of Montano Rd. / Coors Blvd. It is called Andalucia, Tract 6 in this study. This Traffic Impact Study Update considers the entirety of the Andalucia, Tract 6 land, but the primary application for approval by the City of Albuquerque Environmental Planning Commission is the retail commercial component on the north half of the project. The

following commercial uses are proposed for this property (as mentioned the proposed Wal-Mart store has been separated into its component parts):

- *An approximately 40,000 S.F. Supermarket**
- *An approximately 59,000 S.F. Free-standing Discount Store**
- *Approximately 69,700 S.F. of retail commercial building floor space*
- *A Drive-In Bank (3 Drive-In Windows).*
- *High Turnover Sit-Down Restaurants (Approximately 25,100 S.F.)*

**NOTE: The Supermarket floor space and the Free-standing Discount Store floor space combined constitute the Walmart Store. These two land use categories were utilized in the determination of the trip generation rates for the project to provide a conservatively high trip generation rate. This trip generation calculation method results in a 25% or higher trip generation rate than a Supercenter Trip Generation Rate would yield.*

See the conceptual site development plan on Page A-3 in the Appendix of this report to acquire more detailed information about the proposed development plan.

The site plan is conceptual at this point in time and is subject to minor changes as progress takes place in the design process. The plan and level of traffic generation should, however, provide a reliable basis upon which to analyze the impact of the development on the adjacent transportation system and provide guidelines for mitigating the impact and establishing access criteria. The conceptual site plan as it is shown in this report proposes four (4) primary access points or driveways into the sites from arterial roadways.

The proposed retail commercial plan will be accessed from Montano Rd. at Winterhaven Rd. and Antequera; from Coors Blvd. at two proposed driveways located between Dellyne Ave. and Montano Rd. The driveway at Mirandela / Coors Blvd. is an approved right-in, right-out, left-in only unsignalized driveway. A second proposed driveway to the north is designated as a right-in, right-out only access, **and requires T.C.C. approval by the Mid-Region Council of Governments.**

The proposed driveway configuration can be seen on the site development plan on Page A-3 in the Appendix of this study.

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (8th Edition, 2008). Trips for the development were determined based on land uses defined on the Conceptual Site Development Plan on Page A-3 in the Appendix of this report. This project is rather unique in that it is an updated plan for Andalucia, Tract 6. The previous Andalucia, Tract 6 plan was proposed in 2005, and the previous Traffic Impact Study evaluated the trips generated by that plan. This study will consider not only the trips being generated under this new plan, but will provide a comparison to the **trips generated in the 2007 Traffic Impact Study**. The resulting number of trips generated for the currently proposed development (and comparison with the previous plan **in the 2007 TIS**) are summarized in the following table:

Andalucia, Tract 6 Update (Montano / Coors)

Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

COMMENT	USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units					
Walmart (Grocery)	Supermarket (850)	40.00	4,070	88	56	251	241
Walmart (Dry Goods)	Free-Standing Discount Store (815)	59.00	2,363	43	20	148	148
NORTH TRACT	Shopping Center (820)	70.24	5,398	76	49	246	256
NORTH TRACT	Drive-In Bank (912)	3	418	16	12	40	42
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	24.10	3,064	144	133	159	110
SOUTH TRACT	Drive-In Bank (912)	12.37	1,833	86	67	160	160
SOUTH TRACT	General Office Building (710) - Less than 51,000 S.F.	10.00	147	18	2	4	20
Apartments	Apartment, Post-1973 (220)	345	2,214	35	138	135	73
Subtotal			19,507	506	477	1,143	1,050
Subtotal (Commercial Trips)			17,146	453	337	1,004	957
Pass-by Trip Reduction 30%			(5,144)	(136)	(101)	(301)	(287)
Net New Commercial Trips on Adjacent Transportation System			12,002	317	236	703	670
New Office Trips on Adjacent Transportation System			147	18	2	4	20
New Residential Trips on Adjacent Transportation System			2,214	35	138	135	73
Total New Trips on Adjacent Transportation System			14,363	370	376	842	763
Net New Trips Utilized in Original Traffic Impact Study			19,363	502	620	1,038	906
Net Increase (Decrease) in Traffic Generated			(5,000)	(132)	(244)	(196)	(143)
Percentage Increase (-Decrease) in Traffic Generated			-26%	-26%	-39%	-19%	-16%

Pass-by trip credits were taken for the 2015 analysis due to the size of the development considered and types of commercial uses. Pass-by trip credits taken for retail commercial uses only the ITE manual allows this percentage to grow as high as 50 percent but a more conservative 30 percent was used for this analysis.

NOTE: The Supermarket floor space and the Free-standing Discount Store floor space combined constitute the Walmart Store. These two land use categories were utilized in the determination of the trip generation rates for the project to provide a conservatively high trip generation rate. This trip generation calculation method results in a 25% or higher trip generation rate than a Supercenter Trip Generation Rate would yield.

More detailed information regarding trip generation rates for this project can be viewed in Pages A-6 thru A-15 in the Appendix of this report.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Trips were distributed as follows:

Commercial Land Use / Walmart Use

Primary and diverted linked trips for the both the commercial land use development were distributed proportionally to the 2015 projected population of Data Analysis Subzones within a two mile radius of the proposed development. Population data for the years 2015 and 2025 Data were taken from Mid-Region Council of Governments' 2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico supplied by the Middle Rio Grande Council of Governments (MRGCOG). Population data from the years 2015 and 2025 was interpolated linearly to obtain 2015 population data to utilize for this analysis. Population Subzones were grouped based on

the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones is shown on Appendix Pages A-16 and A-18 thru A-21.

In addition, the same analysis was performed for the Walmart store, but with an expanded and uneven boundary established approximately midway between this proposed Walmart facility and the nearest three adjacent existing Walmart facilities. See Trip Distribution Map on Page A-16 in the Appendix and Trip Distribution Worksheets on Pages A-22 thru A-24 in the Appendix of this report.

Residential Land Use

Primary and diverted linked trips for residential development have been distributed proportionally to the 2015 projected employment of Subareas citywide. Employment data for 2015 and 2025 Data were taken from Mid-Region Council of Governments' 2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico supplied by the Middle Rio Grande Council of Governments (MRGCOG). Employment data was interpolated linearly between the 2015 and 2025 data to obtain 2015 values and adjusted for distance from the proposed new facility. The trip distribution worksheets and associated map of subareas and data analysis subzones are shown on Appendix Pages A-17 and A-25 thru A-28.

TRIP ASSIGNMENT

Trip assignments are made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments including pass-by trip assignments are shown on Appendix Pages A-29 thru A-38.

BACKGROUND TRAFFIC GROWTH

The annual growth rate utilized in this Traffic Impact Study is 1.2% annually. This annual growth rate was determined by evaluating historic traffic flow data from the Mid-Region Council of Governments (MRCOG) annually published Traffic Flow Maps to determine a recent historic growth trend over the most recent five-year period of time (2006 – 2010). Most of the growth rate analyses yielded recent historic growth trends of less than 1%. It is the conclusion of this study that a 1.2% annual growth rate will be the best model of actual traffic growth in the area which again reflects a more conservative approach.

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2015 BUILDOUT

The established growth rates were applied to the most recent peak hour traffic counts (furnished by the consulting engineer and conducted for this study), and then the trips from the *Credit Union (Dellyne Ave / Coors Blvd) Traffic Impact Study* were added in to establish the 2015 background NO BUILD traffic volumes. To these volumes, the generated trips based on implementation of the proposed Andalucia, Tract 6 development

was added to obtain 2015 BUILD volumes for the intersection analyses. See Appendix Pages A-39 thru A-54 for further information regarding 2015 turning movement counts. The 2015 BUILD Conditions turning movement counts include trips generated by 100% implementation of the Andalucia, Tract 6 development (currently proposed plan).

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections in the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2000, using Synchro 7 software. Synchro 8 software has recently been released which conforms with the 2010 Highway Capacity Manual, but there are several significant inconsistencies or bugs in the software. Trafficware, Inc., producers of Synchro 8 software are working on the computational engine to rectify the known issues with the program. Fixes are not expected before the end of the year. Therefore, this analysis was performed using Synchro 7. For signalized intersections, the operational method of analysis was used for implementation year (2015) conditions (NO BUILD and BUILD).

Capacity analyses were performed for the following traffic conditions.

Andalucia, Tract 6 Implementation Year – 2015

Implementation Year (2015) - NO BUILD

Implementation Year (2015) – BUILD of 2005 Approved Plan

Implementation Year (2015) – BUILD of Current Proposed Plan

The results of the implementation year (2015) for the Andalucia, Tract 6 developments' capacity analyses are summarized in the following sections - *Results and Discussion of Intersection Capacity Analyses*.

RESULTS OF SIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2015)

Intersection #1 – La Orilla Rd. / Coors Blvd.

The intersection of La Orilla Rd. / Coors Blvd. was not analyzed in this study. In determining the scope of analysis for this study, the City of Albuquerque determined that analysis of this intersection was not necessary for two reasons:

- 1) The trip distribution / trip assignments analysis indicated that there were not a significant volume of new turning movements generated at this intersection by this project.
- 2) In the previous 2007 Traffic Impact Study, the analysis of these intersections based on a project that generated a higher volume of trips did not result in any mitigation measures being required. Therefore, it was considered that the analysis of these same intersections when applying a project that generates a lesser volume of trips will not result in any mitigation measure.

Intersection #2 – Montano Plaza / Coors Blvd.

The intersection of Montano Plaza / Coors Blvd. was not analyzed in this study. In determining the scope of analysis for this study, the City of Albuquerque determined that analysis of this intersection was not necessary for two reasons:

- 1) The trip distribution / trip assignments analysis indicated that there were not a significant volume of new turning movements generated at this intersection by this project.
- 2) In the previous 2007 Traffic Impact Study, the analysis of these intersections based on a project that generated a higher volume of trips did not result in any mitigation measures being required. Therefore, it was considered that the analysis of these same intersections when applying a project that generates a lesser volume of trips will not result in any mitigation measure.

Intersection #3 - Montano Rd. / Coors Blvd. – Pages A-55 thru A-58

The intersection data and results of the analysis of the signalized intersection of Montano Rd. / Coors Blvd. are summarized in the following tables:

Existing Geometry (Montano Rd. / Coors Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Montano Rd.	2	0	2	0	1
WB Montano Rd.	2	0	1	1	0
NB Coors Blvd.	2	0	3	0	2*
SB Coors Blvd.	2	0	3	0	1

* - Note that dual northbound right turn lanes were constructed by this developer as a result of the mitigation requirement to construct a fourth northbound thru lane on Coors Blvd. along the frontage of the project.

Intersection: **#3 - Montano Rd. / Coors Blvd.**

2015 AM Peak Hour						2015 PM Peak Hour					
NO BUILD GEOM.			BUILD GEOMETRY			NO BUILD GEOM.			BUILD GEOMETRY		
NO BUILD			2005 PLAN			NO BUILD			2005 PLAN		
	Lanes	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	LOS-Delay
Eastbound - Montano Rd.											
L	2	E - 55.7	2	E - 55.7	E - 55.8	2	F - 222	2	F - 222	F - 222	F - 222
T	2	F - 160	2	F - 186	F - 163	2	D - 43.5	2	D - 51.6	D - 49.4	D - 49.4
R	1	C - 29.1	1	C - 29.0	C - 27.4	1	D - 35.6	1	D - 45.6	D - 43.6	D - 43.6
Westbound - Montano Rd.											
L	2	E - 63.6	2	F - 200	F - 172	2	D - 52.1	2	D - 49.0	E - 65.6	E - 65.6
T	2	C - 33.3	2	C - 34.2	C - 34.1	2	F - 153	2	F - 210	F - 214	F - 214
R	>	C - 33.3	>	C - 34.2	C - 34.1	>	F - 153	>	F - 210	F - 214	F - 214
Northbound - Coors Blvd.											
L	2	F - 148	2	F - 184	F - 137	2	F - 186	2	F - 214	F - 220	F - 220
T	3	E - 73.0	3	F - 109	F - 112	3	D - 43.7	3	D - 47.2	D - 46.4	D - 46.4
R	1	F - 113	2	B - 19.4	C - 20.1	1	B - 12.6	2	B - 11.5	B - 13.3	B - 13.3
Southbound - Coors Blvd.											
L	2	F - 225	2	F - 209	F - 204	2	F - 126	2	F - 131	F - 124	F - 124
T	3	D - 52.5	3	E - 69.3	E - 76.8	3	F - 98.6	3	F - 146	F - 127	F - 127
R	1	B - 18.5	1	B - 19.7	B - 19.7	1	C - 26.4	1	C - 27.7	C - 27.1	C - 27.1
Intersection:	F - 100		F - 114		F - 107	F - 96.9		F - 121		F - 119	F - 119

NOTE: > denotes a shared thru/right and / or thru/left turn lane.

The three conditions analyzed and summarized above for this intersection are 1) 2015 NO BUILD, 2) 2015 BUILD (2005 Approved Plan), and 3) 2015 BUILD (2011 current proposed plan). Since this developer constructed the dual northbound right turn lanes on Coors Blvd. at Montano Rd. as a mitigation measure associated with the development of the 2005 plan, then the NO BUILD analysis assumes that there is only a single northbound right turn lane since that is what would exist today absent this land development project. The 2015 BUILD (2005 Plan) assumes the intersection geometry that exists today with the traffic from the approved 2005 Plan superimposed onto the 2015 NO BUILD Volumes. The 2015 BUILD (2011 Plan) assumes the intersection geometry that exists today with the traffic from the currently proposed 2011 Plan superimposed onto the 2015 NO BUILD Volumes. (NOTE: The developer constructed a fourth northbound thru lane on Coors Blvd. from Dellyne Ave. to Montano Rd. Since there is not an existing fourth northbound thru lane on Coors north of Montano Rd., the new lane was configured as a second right turn lane for now).

In summary, it can be concluded that the volumes generated by the 2011 Plan have minimal impact on the intersection for the 2015 AM Peak Hour condition and moderate impact on the intersection for the 2015 PM Peak Hour condition. Also, since the 2011 Plan generates significantly less traffic than the 2005 Plan, then the levels-of-service and delays associated with the approved 2005 Plan are higher than those for the newly proposed 2011 Plan. In other words, the proposed 2011 Plan results in a reduction in delays at this intersection when compared to the 2005 Plan for all conditions analyzed.

Proposed optimized timing for the intersection of Montano Rd. / Coors Blvd. can be maintained by constructing median pedestrian push buttons on Coors Blvd. so that pedestrians will have time to walk from the curb to the median and then push the button in the median to cross the other half of Coors Blvd.

The Queuing Analysis for this signalized intersection is calculated using Poisson's Arrival Equations with an associated 95th Percentile confidence level. The Queuing Analysis for this intersection is summarized in the following table.

Queueing Analysis Summary Sheet

Project: Andalusia Update (Montano Rd / Coors Blvd)
 Intersection: Montano Rd / Coors Blvd

2015											
Approach			Left Turns			Thru Movements			Right Turns		
Eastbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	234	290	2	1,107	Cont	1	300	290
AM NO BUILD Queue			2	248	200	2	1,185	750	1	330	425
AM BUILD Queue			2	248	200	2	1,226	775	1	372	450
Existing Lane Length			2	262	290	2	271	Cont	1	357	290
PM NO BUILD Queue			2	278	250	2	304	250	1	395	525
PM BUILD Queue			2	278	250	2	401	325	1	497	625
Westbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	230	380	2	216	Cont	0	148	0
AM NO BUILD Queue			2	245	200	2	229	200	0	157	225
AM BUILD Queue			2	264	225	2	229	200	0	157	225
Existing Lane Length			2	378	380	2	1,051	Cont	0	154	0
PM NO BUILD Queue			2	402	325	2	1,114	750	0	163	250
PM BUILD Queue			2	438	350	2	1,114	750	0	163	250
Northbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	252	650	3	1,124	Cont	2	622	450
AM NO BUILD Queue			2	282	225	3	1,196	550	2	659	450
AM BUILD Queue			2	348	275	3	1,243	575	2	659	450
Existing Lane Length			2	567	650	3	1,638	Cont	2	235	450
PM NO BUILD Queue			2	640	475	3	1,748	825	2	249	225
PM BUILD Queue			2	824	575	3	1,815	850	2	249	225
Southbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	622	475	3	1,312	Cont	1	11	320
AM NO BUILD Queue			2	659	450	3	1,398	625	1	12	50
AM BUILD Queue			2	671	450	3	1,417	625	1	12	50
Existing Lane Length			2	314	475	3	1,463	Cont	1	65	320
PM NO BUILD Queue			2	333	275	3	1,562	750	1	69	125
PM BUILD Queue			2	359	300	3	1,619	750	1	69	125

AM PM
 Cycle Length: 120 130

NOTE: Queue lengths are in feet.

All calculated queue lengths at this intersection appear to be adequate. The right turn calculated queue length can be reduced by 50% to account for right-turns-on-red and overlap phases. Also, the eastbound right turn lane cannot be extended due to the presence of an existing driveway. No recommendation is made.

Intersection #4 – Dellyne Ave. (Learning Rd.) / Coors Blvd. – Pages A-59 thru A-62

The intersection data and results of the analysis of the signalized intersection of Dellyne Ave. (Learning Rd.) / Coors Blvd. are summarized in the following tables:

Existing Geometry (Dellyne Ave. / Coors Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Dellyne Ave.	2	0	0	1	0
WB Learning Rd.	2	0	1	0	1
NB Coors Blvd.	1	0	3	0	1
SB Coors Blvd.	2	0	3	0	1

Intersection: **#4 - Dellyne Ave. (Learning Rd.) / Coors Blvd.**

2015 AM Peak Hour						2015 PM Peak Hour					
NO BUILD GEOM.			BUILD GEOMETRY			NO BUILD GEOM.			BUILD GEOMETRY		
NO BUILD			2005 PLAN			NO BUILD			2005 PLAN		
Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay
Eastbound - Dellyne Ave. (Learning Rd.)											
L	1	F - 101	2	E - 56.5	E - 57.1	1	F - 96.2	2	E - 62.3	E - 61.3	
T	1	D - 37.6	1	F - 115	F - 91.3	1	E - 57.4	1	E - 56.8	E - 55.6	
R	1	E - 69.1	>	F - 115	F - 91.3	1	E - 56.7	>	E - 56.8	E - 55.6	
Westbound - Dellyne Ave. (Learning Rd.)											
L	1	E - 66.9	2	F - 100	F - 96.7	1	E - 73.1	2	F - 112	F - 88.4	
T	1	D - 48.2	1	D - 43.8	D - 43.5	1	E - 59.7	1	E - 59.8	E - 61.4	
R	1	D - 47.7	1	D - 44.8	D - 43.4	1	E - 57.8	1	D - 53.2	D - 54.3	
Northbound - Coors Blvd.											
L	1	C - 29.8	1	C - 31.7	C - 31.6	1	D - 53.0	1	E - 62.9	E - 64.4	
T	3	C - 29.6	3	C - 32.5	C - 29.5	3	B - 18.9	3	C - 31.9	C - 25.6	
R	1	B - 16.7	1	B - 18.0	B - 16.7	1	A - 8.3	1	B - 13.1	B - 11.0	
Southbound - Coors Blvd.											
L	1	E - 68.0	2	E - 74.7	E - 73.9	1	E - 62.4	2	E - 58.4	E - 58.9	
T	3	C - 26.6	3	C - 29.7	C - 24.5	3	B - 15.9	3	C - 20.5	B - 18.1	
R	1	A - 8.1	1	A - 2.6	A - 2.2	1	A - 1.3	1	A - 7.1	A - 6.2	
Intersection:	D - 36.0		D - 42.4	D - 36.3		C - 23.6		D - 36.9	C - 30.9		

NOTE: > denotes a shared thru/right and / or thru/left turn lane.

The three conditions analyzed and summarized above for this intersection are 1) 2015 NO BUILD, 2) 2015 BUILD (2005 Approved Plan), and 3) 2015 BUILD (2011 current proposed plan). Since this developer constructed improvements to the intersection of Dellyne Ave. (Learning Rd.) / Coors Blvd. as a mitigation measure associated with the development of the 2005 plan, then the NO BUILD analysis assumes that the 2004 geometry is the base geometry. The 2015 BUILD (2005 Plan) assumes the intersection geometry that exists today with the traffic from the approved 2005 Plan superimposed onto the 2015 NO BUILD Volumes. The 2015 BUILD (2011 Plan) assumes the intersection geometry that exists today with the traffic from the currently proposed 2011 Plan superimposed onto the 2015 NO BUILD Volumes.

In summary, it can be concluded that the volumes generated by the 2011 Plan have minimal impact on the intersection for the 2015 AM Peak Hour condition and moderate impact on the intersection for the 2015 PM Peak Hour condition. Also, since the 2011 Plan generates significantly less traffic than the 2005 Plan, then the levels-of-service and delays associated with the approved 2005 Plan are higher than those for the newly proposed 2011 Plan. In other words, the proposed 2011 Plan results in a reduction in delays at this intersection when compared to the 2005 Plan for all conditions analyzed.

Proposed optimized timing for the intersection of Dellyne Ave. (Learning Rd.) / Coors Blvd. can be maintained by constructing median pedestrian push buttons on Coors Blvd. so that pedestrians will have time to walk from the curb to the median and then push the button in the median to cross the other half of Coors Blvd.

The Queuing Analysis for this signalized intersection is calculated using Poisson's Arrival Equations with an associated 95th Percentile confidence level. The Queuing Analysis for this intersection is summarized in the following table.

Queueing Analysis Summary Sheet

Project: Andalusia Update (Montano Rd / Coors Blvd)
 Intersection: Dellyne Ave / Coors Blvd

2015											
Approach			Left Turns			Thru Movements			Right Turns		
Eastbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	231	120	1	30	Cont	0	282	0
AM NO BUILD Queue			2	242	200	1	39	75	0	296	375
AM BUILD Queue			2	270	225	1	39	75	0	296	375
Existing Lane Length			2	109	120	1	8	Cont	0	101	0
PM NO BUILD Queue			2	114	125	1	20	50	0	106	175
PM BUILD Queue			2	179	175	1	20	50	0	106	175
Westbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	51	180	1	8	Cont	1	8	180
AM NO BUILD Queue			2	63	75	1	13	50	1	18	50
AM BUILD Queue			2	136	125	1	34	75	1	78	125
Existing Lane Length			2	37	180	1	7	Cont	1	11	180
PM NO BUILD Queue			2	66	75	1	21	50	1	38	100
PM BUILD Queue			2	236	200	1	82	150	1	70	125
Northbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			1	59	350	3	1,615	Cont	1	69	200
AM NO BUILD Queue			1	62	125	3	1,693	750	1	88	150
AM BUILD Queue			1	62	125	3	1,723	750	1	116	175
Existing Lane Length			1	337	350	3	2,382	Cont	1	20	200
PM NO BUILD Queue			1	353	475	3	2,496	>1,000 *	1	44	100
PM BUILD Queue			1	353	475	3	2,571	>1,000 *	1	121	200
Southbound			# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length			2	40	280	3	2,077	Cont	1	29	240
AM NO BUILD Queue			2	52	75	3	2,177	>1,000 *	1	30	75
AM BUILD Queue			2	75	100	3	2,177	>1,000 *	1	30	75
Existing Lane Length			2	7	280	3	1,971	Cont	1	141	240
PM NO BUILD Queue			2	21	50	3	2,066	>1,000 *	1	148	225
PM BUILD Queue			2	75	100	3	2,066	>1,000 *	1	148	225

AM PM
 Cycle Length: 120 130

NOTE: Queue lengths are in feet.

All calculated queue lengths at this intersection appear to be adequate except for the eastbound dual left turn lanes, the westbound dual left turn lanes, and the northbound single left turn lane. The dual eastbound left turn lanes cannot be lengthened due to existing right-of-way constraints. Recommendation is made to lengthen the dual westbound left turn lanes and the northbound left turn lane to meet the calculated lengths in the above table if possible.

Intersection #5 – Sevilla Ave. / Coors Blvd.

The intersection of Sevilla Ave. / Coors Blvd. was not analyzed in this study. In determining the scope of analysis for this study, the City of Albuquerque determined that analysis of this intersection was not necessary for two reasons:

- 1) The trip distribution / trip assignments analysis indicated that there were not a significant volume of new turning movements generated at this intersection by this project.
- 2) In the previous 2007 Traffic Impact Study, the analysis of these intersections based on a project that generated a higher volume of trips did not result in any mitigation measures being required. Therefore, it was considered that the analysis of these same intersections when applying a project that generates a lesser volume of trips will not result in any mitigation measure.

Intersection #5 – Western Trail / Coors Blvd.

The intersection of Western Trail / Coors Blvd. was not analyzed in this study. In determining the scope of analysis for this study, the City of Albuquerque determined that analysis of this intersection was not necessary for two reasons:

- 1) The trip distribution / trip assignments analysis indicated that there were not a significant volume of new turning movements generated at this intersection by this project.
- 2) In the previous 2007 Traffic Impact Study, the analysis of these intersections based on a project that generated a higher volume of trips did not result in any mitigation measures being required. Therefore, it was considered that the analysis of these same intersections when applying a project that generates a lesser volume of trips will not result in any mitigation measure.

Intersection #7 – Montano Rd. / 4th St. – Pages A-63 thru A-66

The intersection data and results of the analysis of the signalized intersection of Montano Rd. / 4th St. are summarized in the following tables:

Existing Geometry (Montano Rd. / 4th St.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Montano Rd.	1	0	2	0	1
WB Montano Rd.	1	0	2	0	1
NB 4 th St.	2	0	2	0	1
SB 4 th St.	1	0	1	1	0

Intersection: **#7 - Montano Rd. / Fourth St.**

2015 AM Peak Hour						2015 PM Peak Hour					
NO BUILD GEOM.			BUILD GEOMETRY			NO BUILD GEOM.			BUILD GEOMETRY		
NO BUILD			2005 PLAN			NO BUILD			2005 PLAN		
Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay
Eastbound - Montano Rd.											
L	1	C - 26.2	1	C - 27.4	C - 26.3	1	E - 73.5	1	F - 81.3	F - 111	
T	2	F - 136	2	F - 157	F - 162	2	D - 37.8	2	C - 31.3	C - 30.1	
R	1	D - 35.4	1	D - 39.5	D - 38.8	1	C - 34.8	1	C - 33.9	B - 17.3	
Westbound - Montano Rd.											
L	1	F - 223	1	F - 223	F - 224	1	C - 20.2	1	C - 21.5	C - 21.9	
T	2	D - 37.5	2	D - 38.5	D - 38.7	2	D - 52.6	2	E - 73.6	E - 77.4	
R	1	C - 23.7	1	C - 24.3	C - 24.5	1	B - 17.6	1	B - 18.2	B - 18.7	
Northbound - Fourth St.											
L	2	F - 85.3	2	F - 114	F - 124	2	E - 59.0	2	F - 83.2	E - 79.3	
T	2	C - 32.5	2	C - 32.5	C - 31.7	2	D - 46.9	2	D - 47.0	D - 45.0	
R	1	C - 26.9	1	C - 26.9	C - 26.1	1	C - 29.1	1	C - 29.2	C - 29.2	
Southbound - Fourth St.											
L	1	C - 20.9	1	C - 20.9	C - 20.2	1	D - 41.5	1	D - 40.5	D - 40.5	
T	2	F - 129	2	F - 156	F - 139	2	E - 61.3	2	F - 90.6	F - 100	
R	>	F - 129	>	F - 156	F - 139	>	E - 61.3	>	F - 90.6	F - 100	
Intersection:		F - 93.6		F - 108	F - 105		D - 47.6		E - 59.7	E - 61.4	

The three conditions analyzed and summarized above for this intersection are 1) 2015 NO BUILD, 2) 2015 BUILD (2005 Approved Plan), and 3) 2015 BUILD (2011 current proposed plan). The 2015 NO BUILD and BUILD (2005 Plan) all assume the intersection geometry that exists today with the traffic from the approved 2005 Plan superimposed onto the 2015 NO BUILD Volumes. The 2015 BUILD (2011 Plan) assumes the intersection geometry that exists today with the traffic from the currently proposed 2011 Plan superimposed onto the 2015 NO BUILD Volumes.

In response to neighborhood comments, discussion of the percentage contribution of new trips at the intersection of Montano Rd. / 4th St. follow. The 2011 Plan for Andalusia, Tract 6 (commercial and residential) generates approximately 182 trips per hour during the 2015 AM Peak Hour period through this intersection. Total AM volume at the intersection is 5,293 vehicles per hour. The 2011 Plan comprises approximately 3.4% of the intersection traffic in the 2015 AM Peak Hour. The 2011 Plan generates about 420 vehicles per hour during the 2015 PM Peak Hour. Total volume at the intersection in the PM Peak Hour is 5,105 vehicles per hour. The 2011 Plan comprises approximately 8% of the traffic in the 2015 PM Peak Hour.

In summary, it can be concluded that the volumes generated by the 2011 Plan have moderate impact on the intersection for the 2015 AM and PM Peak Hour conditions. The 2011 Plan results in a slight decrease in delays during the 2015 AM Peak Hour when compared to the 2005 Plan and a minimal increase in delays (1.7 seconds) during the 2015 PM Peak Hour when compared to the 2005 Plan.

The Queuing Analysis for this signalized intersection is calculated using Poisson's Arrival Equations with an associated 95th Percentile confidence level. The Queuing Analysis for this intersection is summarized in the following table.

Queueing Analysis Summary Sheet

Project: Andalucia Update (Montano Rd / Coors Blvd)
 Intersection: Montano Rd / Fourth St

2015											
Approach	Left Turns			Thru Movements			Right Turns				
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length		
Existing Lane Length	1	148	180	2	1,239	Cont	1	473	270		
AM NO BUILD Queue	1	157	250	2	1,298	850	1	505	650		
AM BUILD Queue	1	172	275	2	1,333	875	1	551	675		
Existing Lane Length	1	136	180	2	592	Cont	1	228	270		
PM NO BUILD Queue	1	149	225	2	620	450	1	264	375		
PM BUILD Queue	1	201	300	2	639	475	1	388	500		
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length		
Existing Lane Length	1	121	130	2	361	Cont	1	66	350		
AM NO BUILD Queue	1	127	200	2	378	300	1	69	125		
AM BUILD Queue	1	127	200	2	387	300	1	69	125		
Existing Lane Length	1	153	130	2	1,218	Cont	1	193	350		
PM NO BUILD Queue	1	160	250	2	1,276	850	1	202	300		
PM BUILD Queue	1	160	250	2	1,311	875	1	202	300		
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length		
Existing Lane Length	2	194	160	2	405	Cont	1	179	70		
AM NO BUILD Queue	2	218	200	2	424	325	1	188	275		
AM BUILD Queue	2	274	250	2	424	325	1	188	275		
Existing Lane Length	2	397	160	2	539	Cont	1	158	70		
PM NO BUILD Queue	2	438	350	2	565	425	1	166	250		
PM BUILD Queue	2	572	425	2	565	425	1	166	250		
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length		
Existing Lane Length	1	195	170	2	492	Cont	0	977	0		
AM NO BUILD Queue	1	204	300	2	516	400	0	1,027	>1,000		
AM BUILD Queue	1	204	300	2	516	400	0	1,048	>1,000		
Existing Lane Length	1	168	170	2	496	Cont	0	137	0		
PM NO BUILD Queue	1	176	275	2	520	400	0	149	225		
PM BUILD Queue	1	176	275	2	520	400	0	205	300		

AM
PM
 Cycle Length: 130 130

NOTE: Queue lengths are in feet.

Due to various constraints imposed by virtue of the fact that this intersection is located in a fully developed urban environment, none of the left or right turn lanes can be extended without negatively impacting existing nearby intersections and / or driveways, or causing the reduction in the length of complementary left turn lanes. Therefore, no recommendation is made.

RESULTS OF UNSIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2015)

Intersection #8 – Montano Rd. / Winterhaven Rd. – Pages A-67 thru A-70

The results of the analysis of the unsignalized intersection of Montano Rd. / Winterhaven Rd. are summarized in the following table:

Intersection: #8 - Montano Rd. / Winterhaven Rd. (Mirandela)

2015 AM Peak Hour					2015 PM Peak Hour				
BASE GEOMETRY					BASE GEOMETRY				
		BUILD Condition					BUILD Condition		
	NO BUILD	2005 Plan	2011 Plan		NO BUILD	2005 Plan	2011 Plan		
	Lanes	LOS-Delay	LOS-Delay		Lanes	LOS-Delay	LOS-Delay		
Eastbound - Montano Rd.									
L	1	A - 8.8	A - 9.3	A - 9.2	1	C - 19.3	C - 19.4	C - 19.2	
T	2	A - 0.0	A - 0.0	A - 0.0	2	A - 0.0	A - 0.0	A - 0.0	
R	1	A - 0.0	A - 0.0	A - 0.0	1	A - 0.0	A - 0.0	A - 0.0	
Westbound - Montano Rd.									
L	1	F - 98.7	F - 120	F - 116	1	A - 9.9	B - 13.1	B - 13.4	
T	2	A - 0.0	A - 0.0	A - 0.0	2	A - 0.0	A - 0.0	A - 0.0	
R	>	A - 0.0	A - 0.0	A - 0.0	>	A - 0.0	A - 0.0	A - 0.0	
Northbound - Winterhaven Rd. (Mirandela)									
R	1	C - 18.7	E - 37.0	C - 24.9	1	B - 11.2	B - 14.1	B - 13.8	
Southbound - Winterhaven Rd. (Mirandela)									
R	1	B - 10.4	B - 11.0	B - 10.9	1	C - 25.0	D - 25.5	C - 25.0	

NOTE: > denotes a shared thru/right and / or thru/left turn lane.

The intersection of Montano Rd. / Winterhaven Rd. is currently a right-in, right-out, left-in only unsignalized access intersection. As with the signalized intersection analyzed in this study, there were three conditions analyzed for Montano Rd. / Winterhaven Rd. (Mirandela St.). The 2015 NO BUILD condition was the analysis of the volumes that would be at the intersection if the Andalucia, Tract 6 acreage were to remain vacant. The 2015 BUILD (2005 Plan) considers the analysis of the intersection based on traffic generated by the 2005 Approved Plan. The 2015 BUILD (2011 Plan) considers the analysis of the intersection based on traffic generated by the currently proposed plan (2011). The preceding table demonstrates that the currently proposed 2011 Plan results in slightly less delays than would the implementation of the 2005 Plan.

Also, the calculated westbound left turn queue length (95th percentile) on Montano Rd. at Mirandela St. is 148 feet for the 2015 AM Peak Hour period and 57 feet for the 2015 PM Peak Hour period. The unsignalized 95th percentile queue lengths are those reported by Synchro 7 in the HCM Unsignalized Intersection Report. (See next section for discussion of operation of Montano Rd. / Winterhaven (Mirandela) if the proposed right-in, right-out at Montano Rd. / Antequera Rd. is not approved.)

Intersection #9 –Montano Rd. / Antequera Rd. - Pages A-71 thru A-72

The results of the analysis of the unsignalized intersection of Montano Rd. / Antequera Rd. are summarized in the following table:

Intersection: #9 - Montano Rd. / Antequera Ave.

2015 AM Peak Hour					2015 PM Peak Hour				
BASE GEOMETRY					BASE GEOMETRY				
		BUILD Condition					BUILD Condition		
	NO BUILD	2005 Plan	2011 Plan		NO BUILD	2005 Plan	2011 Plan		
	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	
Eastbound - Montano Rd.									
T	2	A - 0.0	A - 0.0	A - 0.0	2	A - 0.0	A - 0.0	A - 0.0	
R	1	A - 0.0	A - 0.0	A - 0.0	1	A - 0.0	A - 0.0	A - 0.0	
Westbound - Montano Rd.									
T	2	A - 0.0	A - 0.0	A - 0.0	2	A - 0.0	A - 0.0	A - 0.0	
Northbound - Antequera Ave.									
R	1	A - 0.0	D - 28.4	C - 24.6	1	A - 0.0	B - 10.6	B - 10.7	

NOTE: > denotes a shared thru/right and / or thru/left turn lane.

The proposed intersection of Montano Rd. / Antequera Rd. is a right-in, right-out only unsignalized intersection. Implementation and construction of the driveway will require approval from the Mid-Region Council of Governments' (MRCOG) Transportation Coordinating Committee (T.C.C.).

If it becomes the case that the new right-in, right-out driveway on Montano Rd. at Antequera Rd. is not approved by the T.C.C., then the right-turn-in movements and the right-turn-out movements at that driveway would be transferred to the intersection of Montano Rd. / Mirandela (Winterhaven). In that case, during the AM Peak Hour, the northbound right turn movement on Mirandela at Montano will be increased from 141 vph to 191 vph, the eastbound right turn volume will be increased from 37 vph to 123 vph, and the eastbound thru volume will be reduced from 2163 vph to 2113 vph. The resulting impact to the intersection will be that the northbound right turn movement LOS will increase from "C" to "D" with an average delay of 29.2 seconds. Additionally, the westbound left turn calculated queue length will increase from 148 feet to 159 feet. During the PM Peak Hour, the northbound right turn movement on Mirandela at Montano will be increased from 189 vph to 292 vph, the eastbound right turn volume will be increased from 29 vph to 170 vph, and the eastbound thru volume will be reduced from 853 vph to 750 vph. The resulting impact to the intersection will be that the northbound right turn movement LOS will increase from "B" to "C" with an average delay of 18.3 seconds. Additionally, the westbound left turn calculated queue length will increase from 58 feet to 65 feet. Absence of the right-in, right-out driveway at Montano Rd. / Antequera will not have a significant impact on the intersection of Montano Rd. / Winterhaven (Mirandela).

Intersection #10 - E-W Street / Coors Blvd. – Pages A-73 thru A-74

The results of the analysis of the unsignalized intersection of E-W Street / Coors Blvd. are summarized in the following table:

Intersection: **#10 - E-W Street / Coors Blvd.**

2015 AM Peak Hour					2015 PM Peak Hour				
BASE GEOMETRY					BASE GEOMETRY				
			BUILD Condition					BUILD Condition	
	NO BUILD		2005 Plan	2011 Plan		NO BUILD		2005 Plan	2011 Plan
	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	LOS-Delay
Westbound - E-W Street									
R	1	A - 0.0	C - 19.0	C - 15.7	1	A - 0.0	F - 93.3	E - 45.6	
Northbound - Coors Blvd.									
T	4	A - 0.0	A - 0.0	A - 0.0	4	A - 0.0	A - 0.0	A - 0.0	
R	1	A - 0.0	A - 0.0	A - 0.0	1	A - 0.0	A - 0.0	A - 0.0	
Southbound - Coors Blvd.									
L	0	A - 0.0	A - 0.0	A - 0.0	0	A - 0.0	A - 0.0	A - 0.0	
T	3	A - 0.0	A - 0.0	A - 0.0	3	A - 0.0	A - 0.0	A - 0.0	
R	0	A - 0.0	A - 0.0	A - 0.0	0	A - 0.0	A - 0.0	A - 0.0	

NOTE: > denotes a shared thru/right and / or thru/left turn lane.

The proposed East-West Street intersection with Coors Blvd. is a right-in, right-out only unsignalized access to Andalucia, Tract 6 commercial portion of the project. It was approved and constructed under the approved 2005 Plan.

Intersection #11 – Mirandela St. / Coors Blvd. – Pages A-75 thru A-76

A right-turn-in, right-turn-out, left-turn-in driveway was **approved and** constructed approximately midway between the E-W Street and Dellyne Ave. based on the 2005 Plan. The results of the analysis of the unsignalized intersection of Mirandela St. / Coors Blvd. are summarized in the following table:

Intersection: **#11 - Mirandela Ave. / Coors Blvd.**

2015 AM Peak Hour					2015 PM Peak Hour				
BASE GEOMETRY					BASE GEOMETRY				
			BUILD Condition					BUILD Condition	
	NO BUILD		2005 Plan	2011 Plan		NO BUILD		2005 Plan	2011 Plan
	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	LOS-Delay	LOS-Delay
Westbound - Mirandela Ave.									
R	1	B - 10.3	B - 10.3	A - 9.9	1	B - 11.1	B - 14.3	B - 12.4	
Northbound - Coors Blvd.									
T	4	A - 0.0	A - 0.0	A - 0.0	4	A - 0.0	A - 0.0	A - 0.0	
R	1	A - 0.0	A - 0.0	A - 0.0	1	A - 0.0	A - 0.0	A - 0.0	
Southbound - Coors Blvd.									
L	1	C - 15.1	D - 28.3	C - 22.6	1	C - 18.7	D - 26.0	D - 28.3	
T	3	A - 0.0	A - 0.0	A - 0.0	3	A - 0.0	A - 0.0	A - 0.0	

Operation of the existing right-in, right-out, left-in only unsignalized driveway is demonstrated to be acceptable for the 2015 AM and PM Peak Hour BUILD conditions.

It should be noted that Levels of Service (LOS) for unsignalized intersections cannot be compared directly with Levels of Service for signalized intersections.

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>Average Delay</u> <u>(secs)</u>	<u>Level-of-Service</u>
≤ 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E

Generally speaking, a Level-of-Service D or better is an acceptable parameter for design purposes.

CONCLUSIONS

The comparison of the NO BUILD with the BUILD condition results of this analysis for the adjacent transportation system associated with the proposed commercial / residential development indicate that there will be minimal increases in average intersection delays along Coors Blvd. at the intersections analyzed in this study. When compared with the approved 2007 Traffic Impact Study evaluating the 2005 plan (which generates more traffic than this plan), the implementation of the currently proposed 2011 Plan will result generally in less delay and more favorable conditions on the adjacent transportation system. The roadway improvements constructed by this developer at the intersection of Dellyne Ave. (Learning Rd.) / Coors Blvd. and at Montano Rd. / Coors Blvd. have reduced the impact of the additional traffic generated by the Andalucia, Tract 6 project (2005 and 2011 Plans).

The implementation year for this study was determined to be 2015 since that is the expected year that the project will be fully implemented. Consideration of the 2017 conditions would be very similar to those of the 2015 in this study since minimal background traffic growth is expected from 2015 to 2017, especially in this economic climate.

In summary, the proposed site development plans for the Andalucia, Tract 6 Project present minimal adverse impact to the adjacent transportation system provided that recommendations are implemented as follows:

RECOMMENDATIONS

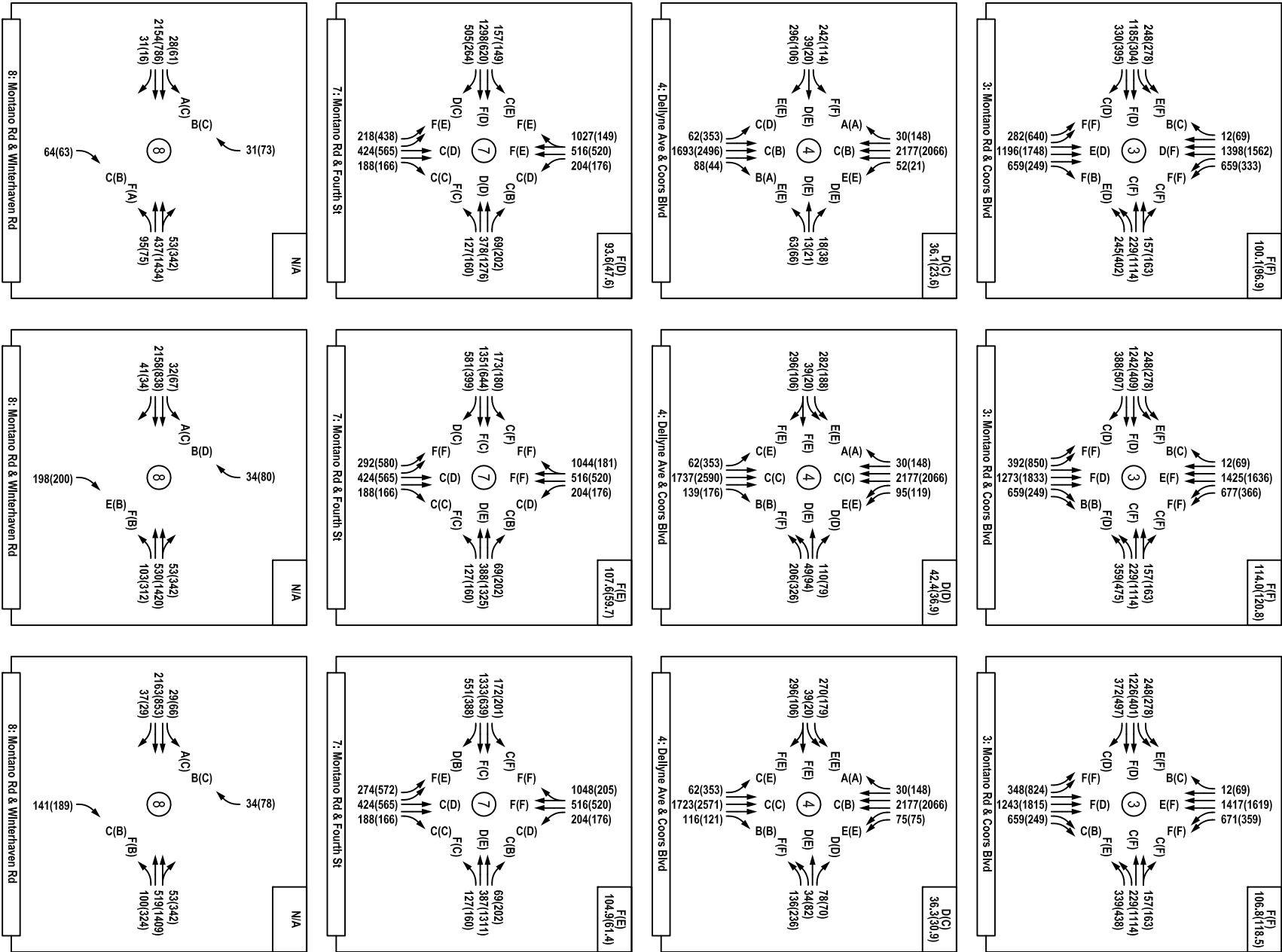
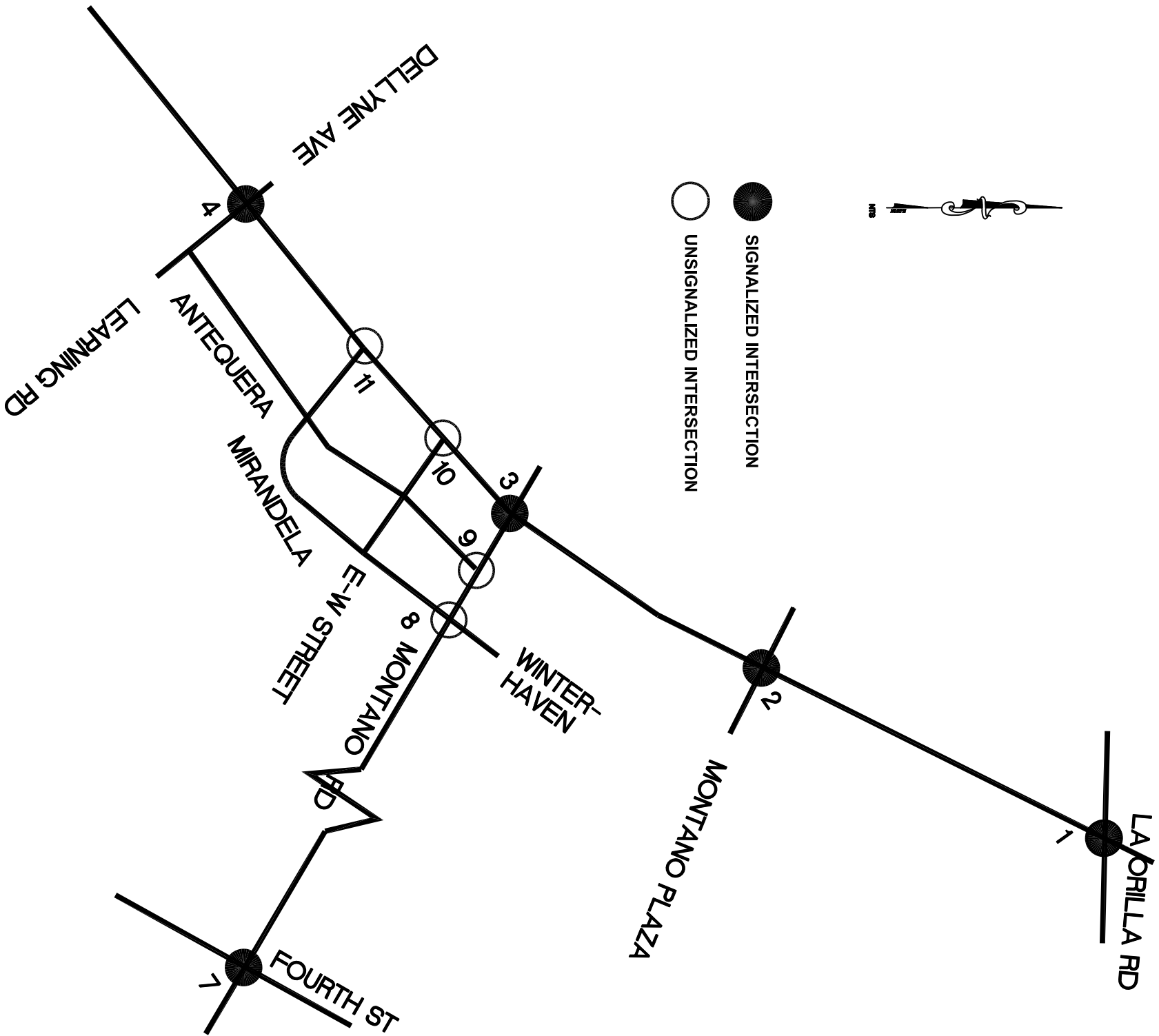
- All design and construction for this project shall insure that adequate site distances at the proposed driveways along Montano Rd. and along Coors Blvd. are provided.
- Driveways shall be constructed using a minimum of 25-foot radius curb returns or the minimum required by the City of Albuquerque Development Process Manual (D.P.M.) or the New Mexico Department of Transportation's State Access Management Manual. Larger radii may be required to accommodate delivery trucks.

General Access:

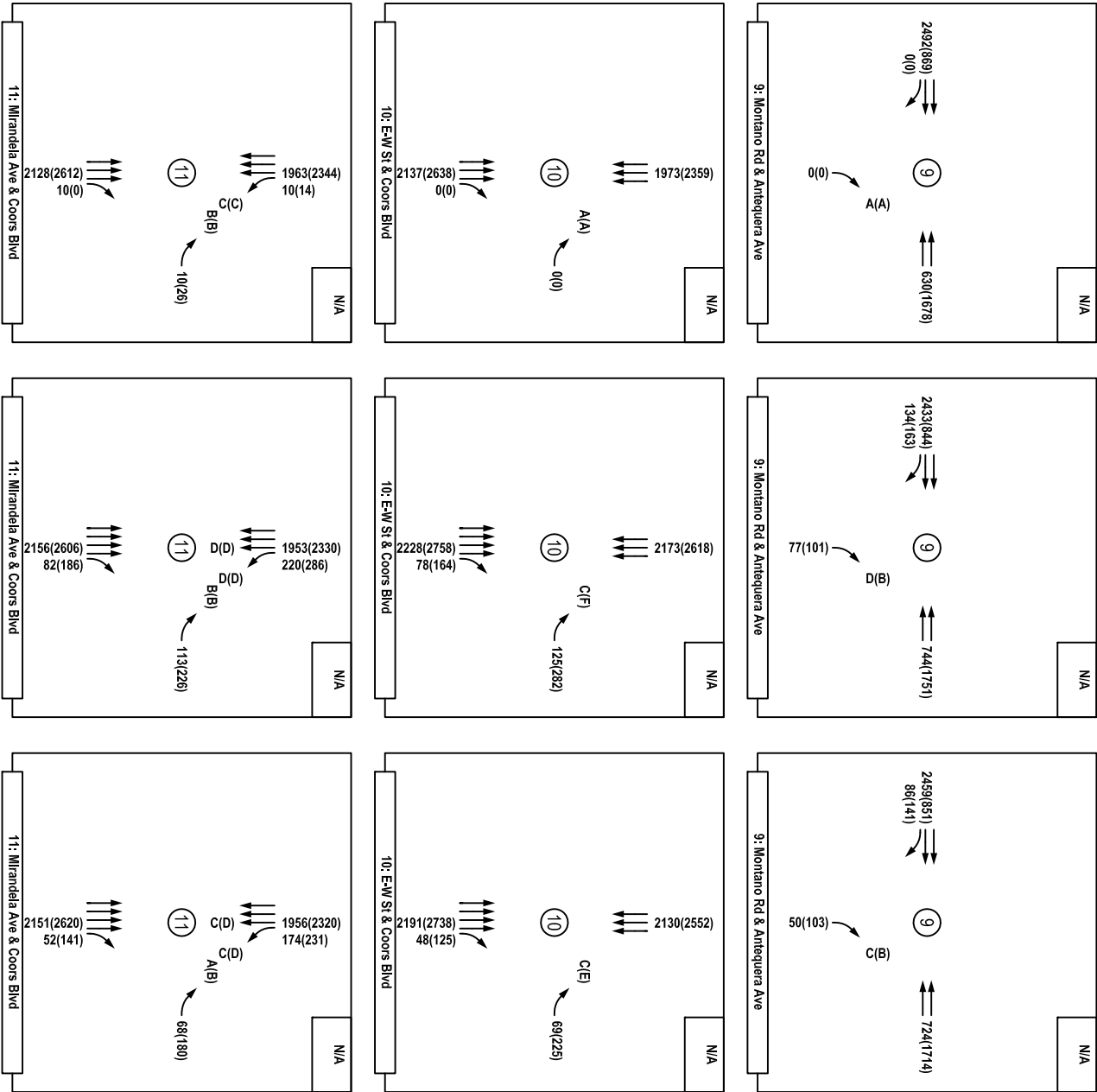
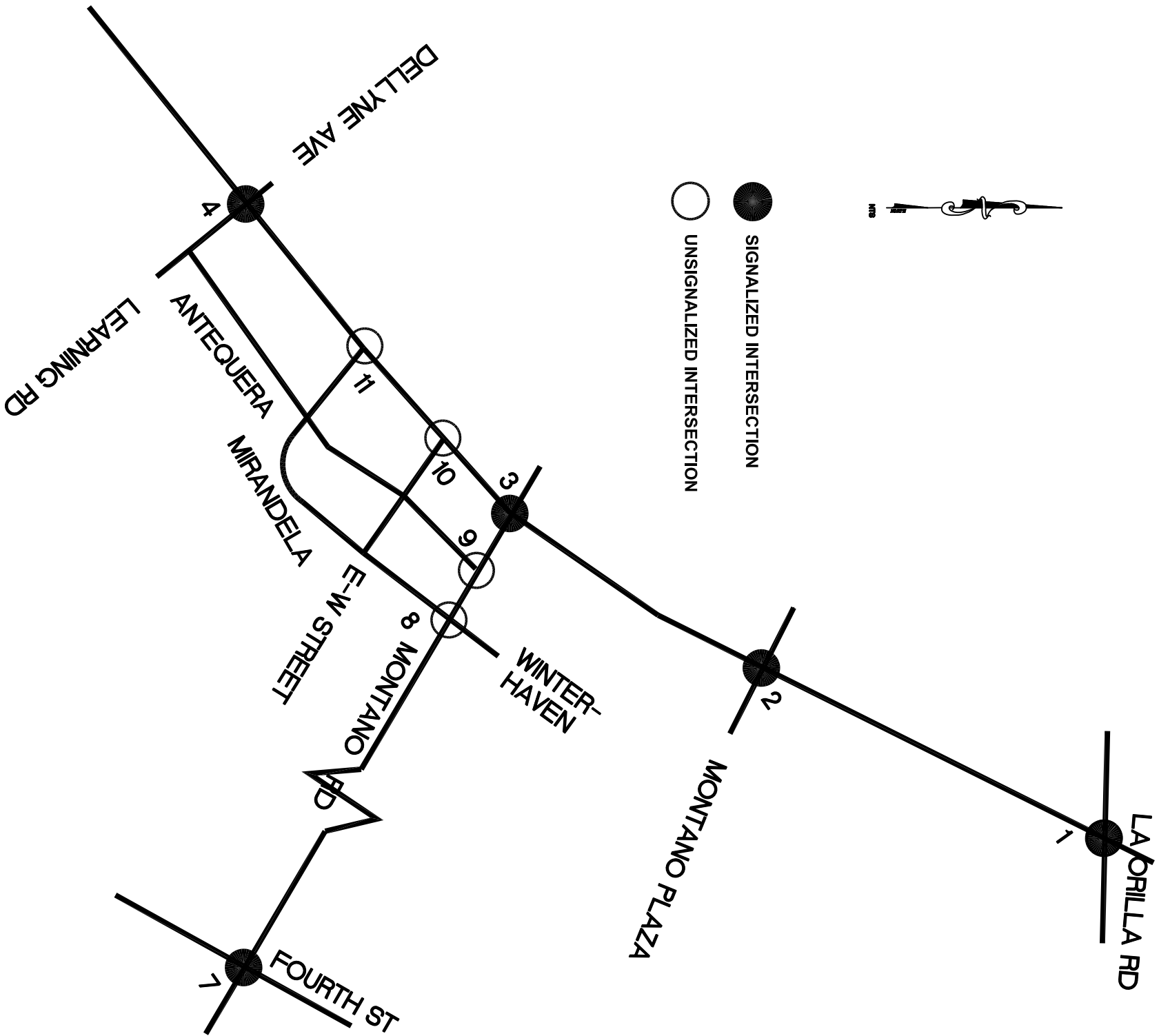
- The Andalucia, Tract 6 Commercial / Residential Development should be accessed via four existing or proposed intersections / driveways along Coors Blvd. and Montano Rd. The primary access to the commercial component at the extreme northwest corner of the project will be via an existing extension of Winterhaven Rd. (Mirandela) to the south of Montano Rd. and the existing approved right-turn-in, right-turn-out, left-turn-in driveway (Mirandela St.) on Coors Blvd. approximately midway between Montano Rd. and Dellyne Ave. (Learning Rd.). Additionally an existing right-turn-in, right-turn-out driveway approximately midway between Mirandela St. and Montano Rd. along the east side of Coors Blvd. will serve the commercial component of this development. The residential component (multi-family) of Andalucia, Tract 6 to the south of the commercial tract is accessed primarily via the existing signalized intersection of Dellyne Ave. (Learning Rd.) / Coors Blvd. as well as the previously mentioned right-turn-in, right-turn-out, left-turn-in driveway (Mirandela St.). Proposed access is demonstrated on the site plan on Page A-3 in the Appendix of this study.

For the 2015 Analysis:

- **Dellyne Ave. (Learning Rd.) / Coors Blvd.** – Lengthen the existing westbound dual left turn lanes as far as possible to try to achieve a total length of 200 feet plus transition. Extend the northbound left turn lane as far as possible to try to achieve a total length of 475 feet plus transition.
- **Montano Rd. / Winterhaven Dr. (Mirandela St.)** – lengthen the westbound left turn lane on Montano Rd. to a minimum total length of 175 feet plus transition.
- **Montano Rd. / Antequera** – Acquire approval from the Transportation Coordinating Committee to construct the driveway on Montano Rd. as a right-in, right-out unsignalized driveway.
- **Montano Rd. / Coors Blvd.** – construct pedestrian push buttons in the medians on Coors Blvd. (Widening of median may be necessary.)
- **Dellyne Ave. (Learning Rd.) / Coors Blvd.** - construct pedestrian push buttons in the medians on Coors Blvd. (Widening of median may be necessary.)



Andalucia, Tract 6 Update
Montano Rd. / Coors Blvd.
LOS / Volume Analysis Map

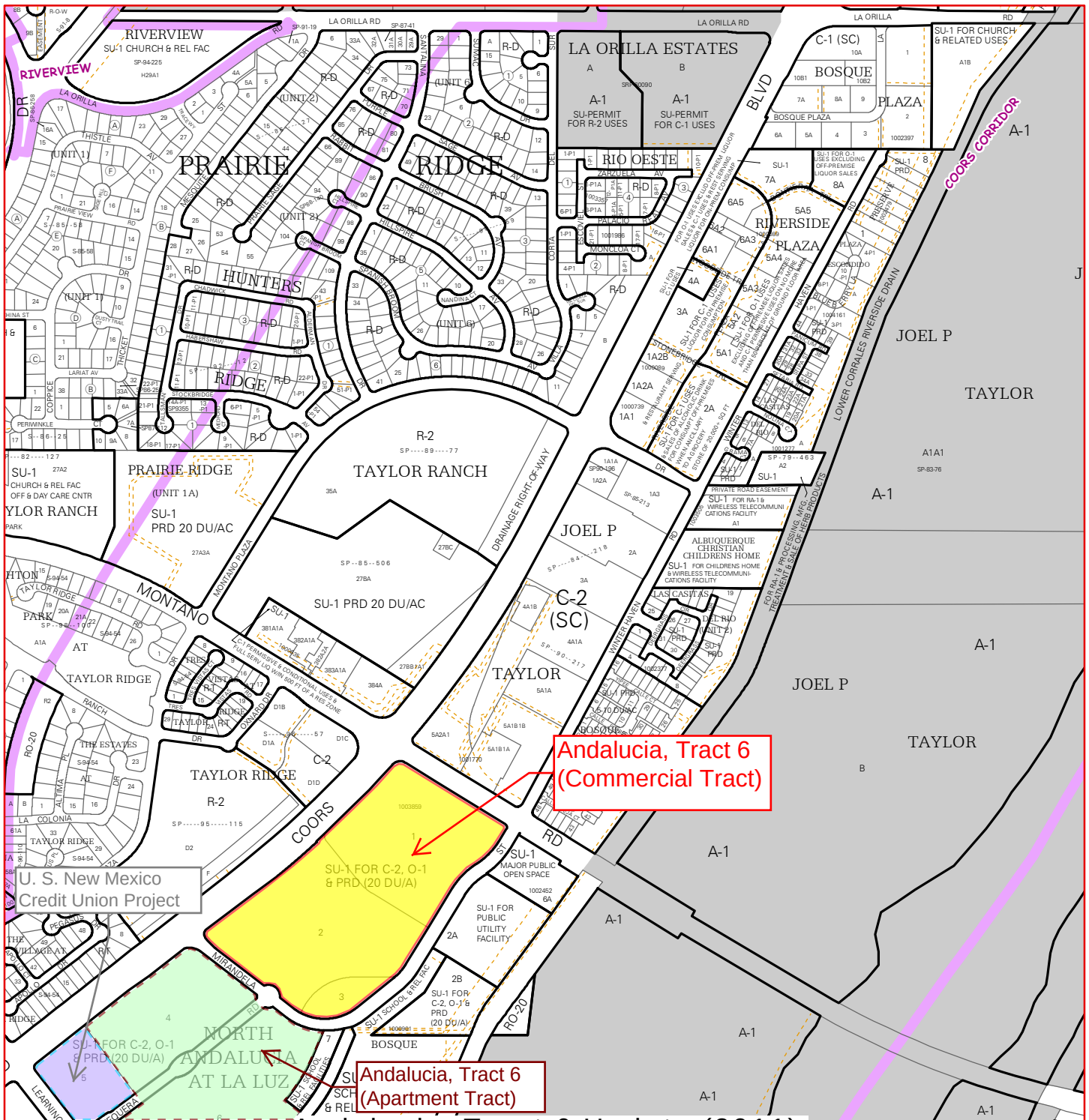


Andalucia, Tract 6 Update
Montano Rd. / Coors Blvd.
LOS / Volume Analysis Map

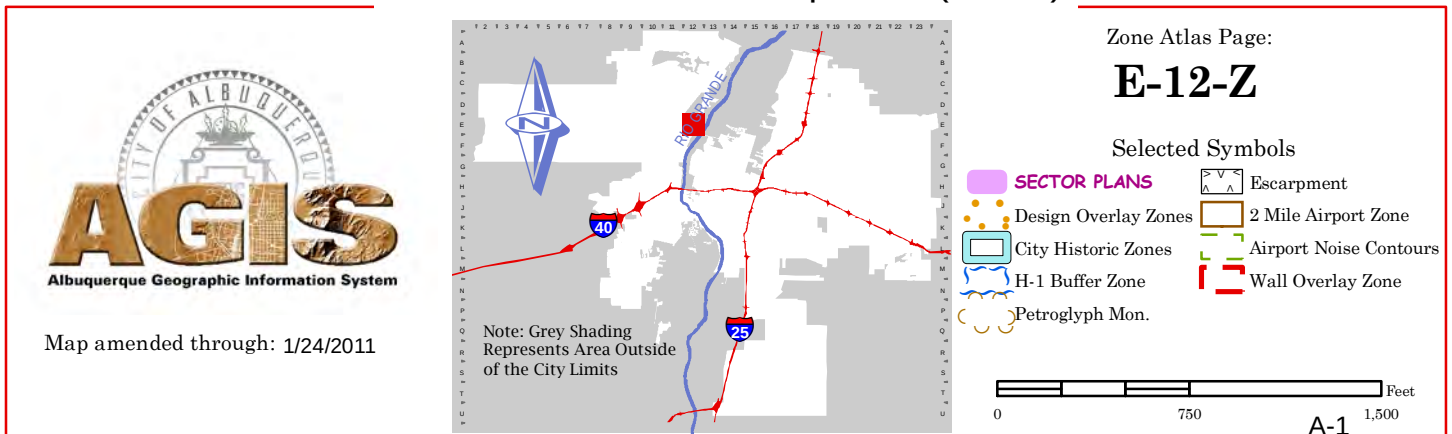
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Appendix



Andalusia, Tract 6 Update (2011)

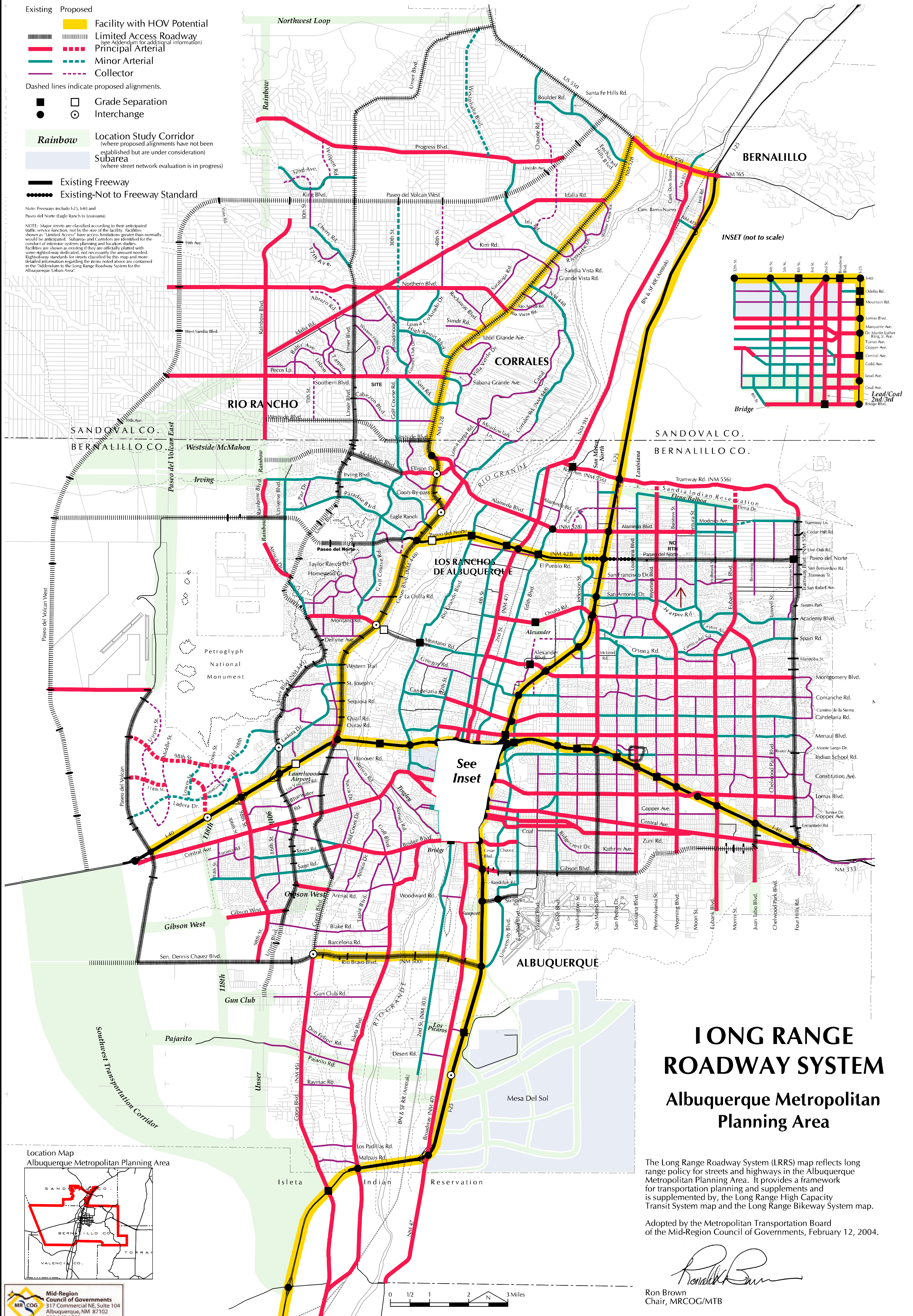




- Existing Proposed
- Facility with HOV Potential
- Limited Access Roadway
(see Addendum for additional information)
- Principal Arterial
- Minor Arterial
- Collector
- Dashed lines indicate proposed alignments.
- Grade Separation
- Interchange
- Rainbow** Location Study Corridor
(where proposed alignments have not been established but are under consideration)
- Subarea
(where street network evaluation is in progress)
- Existing Freeway
- Existing-Not to Freeway Standard

Note: Freeways include I-25, I-40 and Paseo del Norte (Eagle Ranch to Louisiana).

NOTE: Major streets are classified according to their anticipated traffic service function, not by the size of the facility. Facilities shown as "Limited Access" have access limitations greater than normally would be anticipated. Subareas and Corridors are identified for the conduct of intensive systems planning and location studies. Facilities are shown as existing if they are officially planned with some right-of-way dedicated, not necessarily the amount needed. Right-of-way standards for streets classified by this map and more detailed information regarding the items noted above are contained in the "Addendum to the Long Range Roadway System for the Albuquerque Urban Area".



LONG RANGE ROADWAY SYSTEM

Albuquerque Metropolitan Planning Area

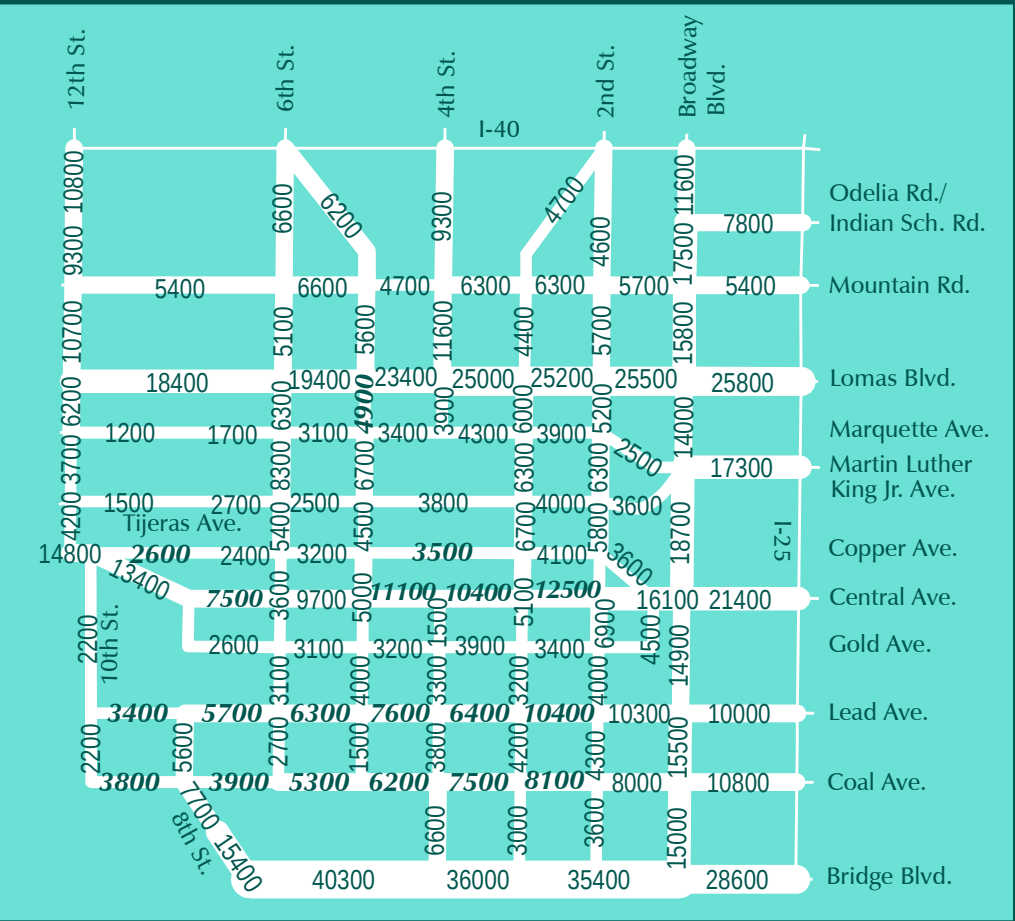
The Long Range Roadway System (LRRS) map reflects long range policy for streets and highways in the Albuquerque Metropolitan Planning Area. It provides a framework for transportation planning and supplements and is supplemented by, the Long Range High Capacity Transit System map and the Long Range Bikeway System map.

Adopted by the Metropolitan Transportation Board of the Mid-Region Council of Governments, February 12, 2004.

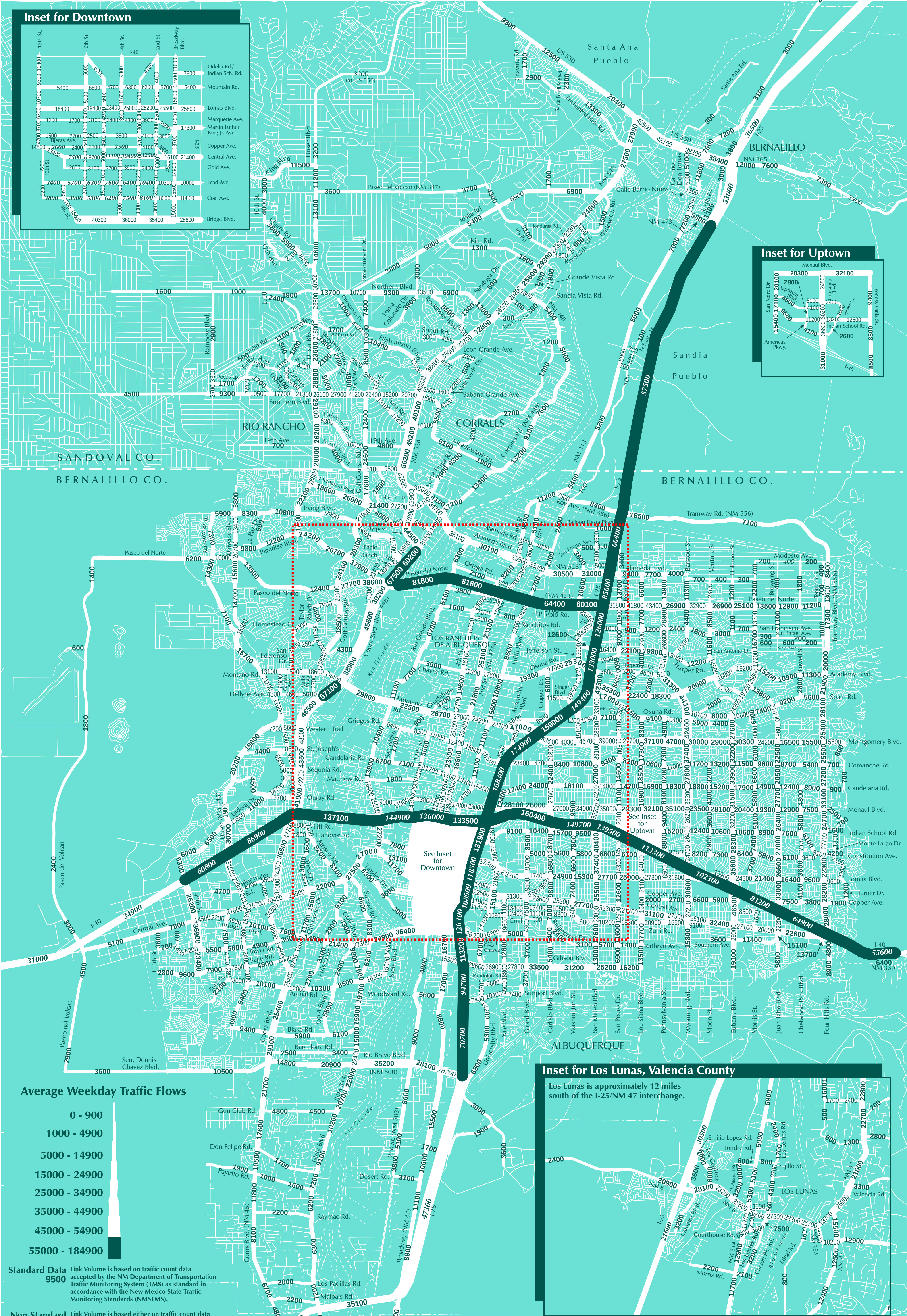
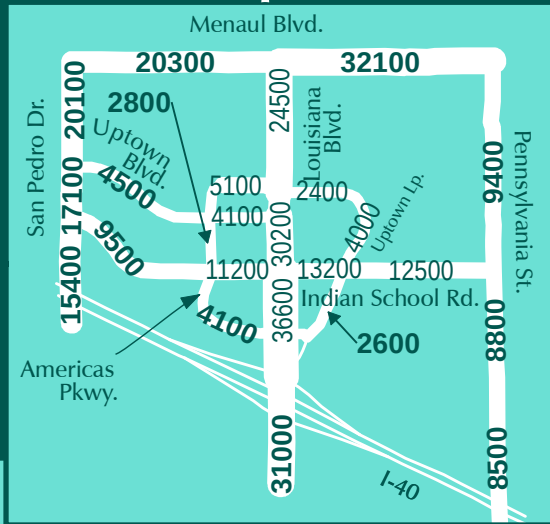
Ron Brown

Ron Brown
Chair, MRCOG/MTB

Inset for Downtown



Inset for Uptown



Average Weekday Traffic Flows

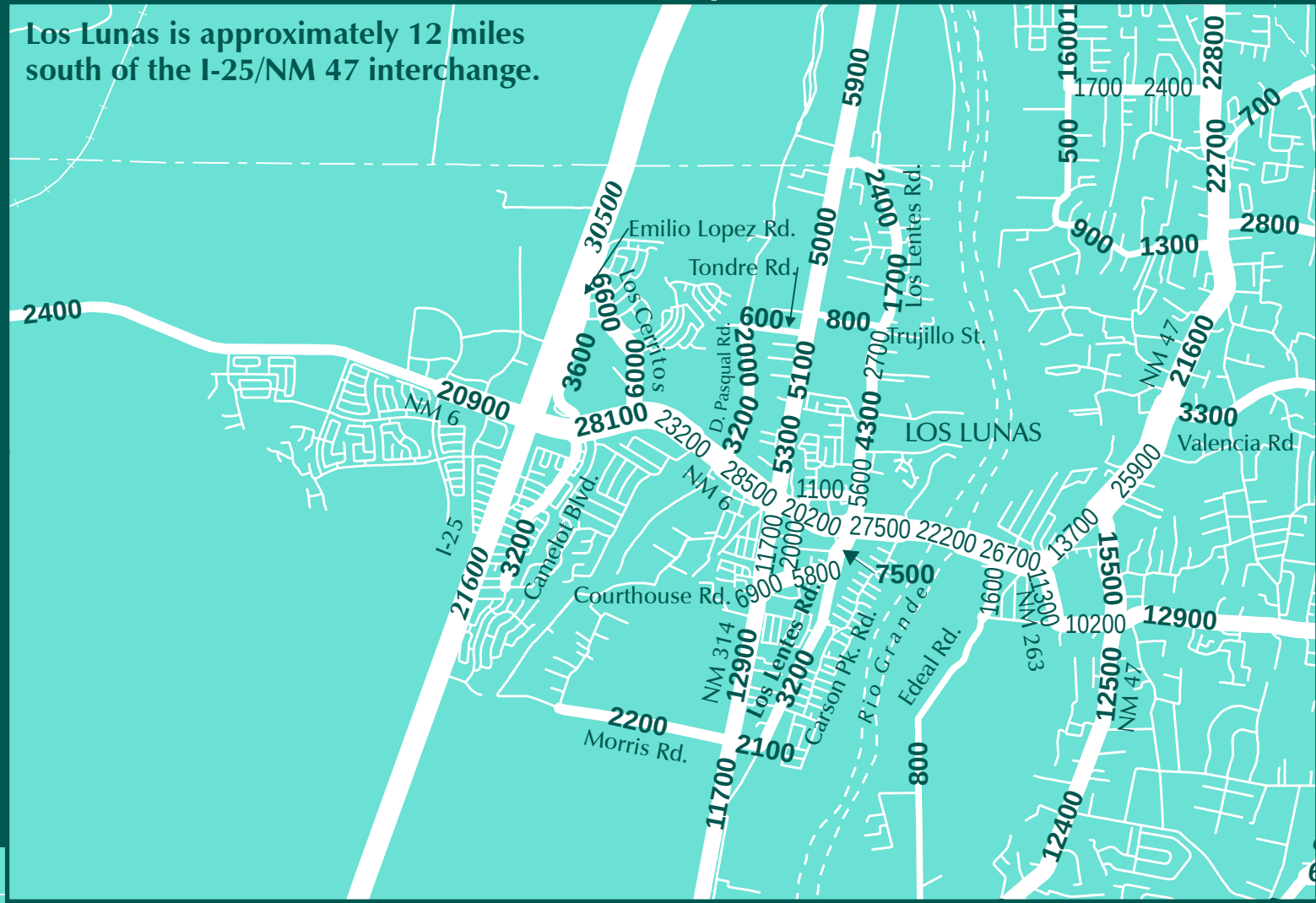


Standard Data Link Volume is based on traffic count data accepted by the NM Department of Transportation Traffic Monitoring System (TMS) as standard in accordance with the New Mexico State Traffic Monitoring Standards (NMSTMS).

Non-Standard Data Link Volume is based either on traffic count data not in compliance with the NMSTMS or on professional judgement. NMDOT recommends that nonstandard data be used with caution.



Inset for Los Lunas, Valencia County



2010 Traffic Flows
for the Greater Albuquerque Area

Map prepared by the Mid-Region Council of Governments in cooperation with the New Mexico Department of Transportation, the local governments in the Albuquerque Metropolitan Planning Area, and the U.S. Department of Transportation, Federal Highway Administration.

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

COMMENT	USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet			Units				
Walmart (Grocery)	Supermarket (850)	40.00	4,070	88	56	251	241
Walmart (Dry Goods)	Free-Standing Discount Store (815)	59.00	2,363	43	20	148	148
NORTH TRACT	Shopping Center (820)	70.24	5,398	76	49	246	256
NORTH TRACT	Drive-In Bank (912)	3	418	16	12	40	42
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	24.10	3,064	144	133	159	110
SOUTH TRACT	Drive-In Bank (912)	12.37	1,833	86	67	160	160
SOUTH TRACT	General Office Building (710) - Less than 51,000 S.F.	10.00	147	18	2	4	20
Apartments	Apartment, Post-1973 (220)	345	2,214	35	138	135	73
Subtotal			19,507	506	477	1,143	1,050
Subtotal (Commercial Trips)			17,146	453	337	1,004	957
Pass-by Trip Reduction 30%			(5,144)	(136)	(101)	(301)	(287)
Net New Commercial Trips on Adjacent Transportation System			12,002	317	236	703	670
New Office Trips on Adjacent Transportation System			147	18	2	4	20
New Residential Trips on Adjacent Transportation System			2,214	35	138	135	73
Total New Trips on Adjacent Transportation System			14,363	370	376	842	763
Net New Trips Utilized in Original Traffic Impact Study			19,363	502	620	1,038	906
Net Increase (Decrease) in Traffic Generated			(5,000)	(132)	(244)	(196)	(143)
Percentage Increase (-Decrease) in Traffic Generated			-26%	-26%	-39%	-19%	-16%
NORTH TRACT (Walmart et al)							
Trips Generated by North Tract			15,313	367	270	844	797
Pass-by Trip Reduction 30%			(4,594)	(110)	(81)	(253)	(239)
>> Net New Commercial Trips on Adjacent Transportation System			10,719	257	189	591	558
				76.72%	79.41%	83.59%	80.87%
SOUTH TRACT							
Trips Generated by South Tract			1,980	104	69	164	180
Pass-by Trip Reduction (Commercial ONLY) 30%			(550)	(26)	(20)	(48)	(48)
>> Net New Commercial Trips on Adjacent Transportation System			1,430	78	49	116	132
				23.28%	20.59%	16.41%	19.13%
Total Commercial / Office Trips (Adj. for Passby)			335	238	707	690	
APARTMENTS TRACTS							
>> Residential Trips Generated			2,214	35	138	135	73
Walmart Trips			6,433	131	76	399	389
Pass-by Trip Reduction 30%			(1,930)	(39)	(23)	(120)	(117)
Net New Wal-Mart Trips on Adjacent Transportation System			4,503	92	53	279	272
Balance of Net Commercial Trips			6,216	165	136	312	286

NOTE: Walmart Trips were separated from other commercial trips so that they could be distributed differently (based on locale of adjacent existing Walmart Stores.)

Supermarket' and 'Free-Standing Discount Store' categories were utilized in the determination of the trip generation rates for the project to provide a conservatively high trip generation rate. This trip generation calculation method results in a 25% or higher trip generation rate than a Supercenter Trip Generation Rate would yield.

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
Supermarket (850)		4,070	88	56	251	241
		1,000 S.F.				

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{66.95 (X) + 1391.56}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{3.59 (X) + 0}{61\% \text{ Enter, } 39\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$Ln(T) = \frac{0.61 Ln(X) + 3.95}{51\% \text{ Enter, } 49\% \text{ Exit}}$$

Comments:

Walmart (Grocery)

Based on ITE Trip Generation Manual - 8th Edition

*Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)*

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		ENTER	EXIT	ENTER	EXIT
Units					
59.00					
1,000 S.F.					
Free-Standing Discount Store (815)		43	20	148	148

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$\ln(T) = \begin{matrix} 1.52 & \ln(X) + & 1.57 \\ 50\% & \text{Enter,} & 50\% \text{ Exit} \end{matrix}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

$$T = \begin{matrix} 1.06 & (X) + & 0 \\ 68\% & \text{Enter,} & 32\% \text{ Exit} \end{matrix}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

$$T = \begin{matrix} 5 & (X) + & 0 \\ 50\% & \text{Enter,} & 50\% \text{ Exit} \end{matrix}$$

Comments:

Walmart (Dry Goods)

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
70.24						
1,000 S.F.						
Shopping Center (820)		5,398	76	49	246	256

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$\text{Ln}(T) = 0.65 \text{ Ln}(X) + 5.83$$

50% Enter, 50% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

$$\text{Ln}(T) = 0.59 \text{ Ln}(X) + 2.32$$

61% Enter, 39% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

$$\text{Ln}(T) = 0.67 \text{ Ln}(X) + 3.37$$

49% Enter, 51% Exit

Comments:

NORTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
3.00						
Drive-In Bank (912)						
Units						
418		16	12	40	42	
Drive-In Lanes						

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{139.25 (X) + 0}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

$$T = \frac{9.44 (X) + 0}{58\% \text{ Enter, } 42\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

$$T = \frac{27.41 (X) + 0}{49\% \text{ Enter, } 51\% \text{ Exit}}$$

Comments:

NORTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		ENTER	EXIT	ENTER	EXIT
Units					
High Turnover (Sit-Down) Restaurant (932)					
		3,064	144	133	159
		110			
1,000 S.F.					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{127.15 (X) + 0}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{11.52 (X) + 0}{52\% \text{ Enter, } 48\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \frac{11.15 (X) + 0}{59\% \text{ Enter, } 41\% \text{ Exit}}$$

Comments:

NORTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Fast Food Restaurant w/o Drive-Thru Window (933)						
Units						
0.00						
1,000 S.F.						

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \begin{matrix} 50\% & \text{Enter,} & 716 & (X) + & 0 \\ & & & & 50\% \text{ Exit} \end{matrix}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \begin{matrix} 60\% & \text{Enter,} & 43.87 & (X) + & 0 \\ & & & & 40\% \text{ Exit} \end{matrix}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \begin{matrix} 51\% & \text{Enter,} & 26.15 & (X) + & 0 \\ & & & & 49\% \text{ Exit} \end{matrix}$$

Comments:

NORTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
12.37						
1,000 S.F.						
Drive-In Bank (912)						
		1,833	86	67	160	160
					160	160

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = 148.15 (X) + 0
50% Enter, 50% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = 12.35 (X) + 0
56% Enter, 44% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = 25.82 (X) + 0
50% Enter, 50% Exit

Comments:

SOUTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
10.00						
1,000 S.F.						
General Office Building (710) - Less than 51,000 S.F.						
		147	18	2	4	
					20	

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{14.729 (X) + 0}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{2.055 (X) + 0}{88\% \text{ Enter, } 12\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \frac{2.369 (X) + 0}{17\% \text{ Enter, } 83\% \text{ Exit}}$$

Comments:

SOUTH TRACT

Based on ITE Trip Generation Manual - 8th Edition

*Andalucia, Tract 6 Update (Montano / Coors)
Trip Generation Data (ITE Trip Generation Manual - 8th Edition)*

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		ENTER	EXIT	ENTER	EXIT
Units					
345.00					
Dwelling Units					
Apartment, Post-1973 (220)		2,214	35	138	135

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{6.06 (X) + 123.56}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{0.49 (X) + 3.73}{20\% \text{ Enter, } 80\% \text{ Exit}}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \frac{0.55 (X) + 17.65}{65\% \text{ Enter, } 35\% \text{ Exit}}$$

Comments:

Tract No.

Based on ITE Trip Generation Manual - 8th Edition

Trip Distribution Boundary
for Walmart Store

Trip Distribution Boundary
for Other Retail Commercial Uses

Montgomery Blvd.

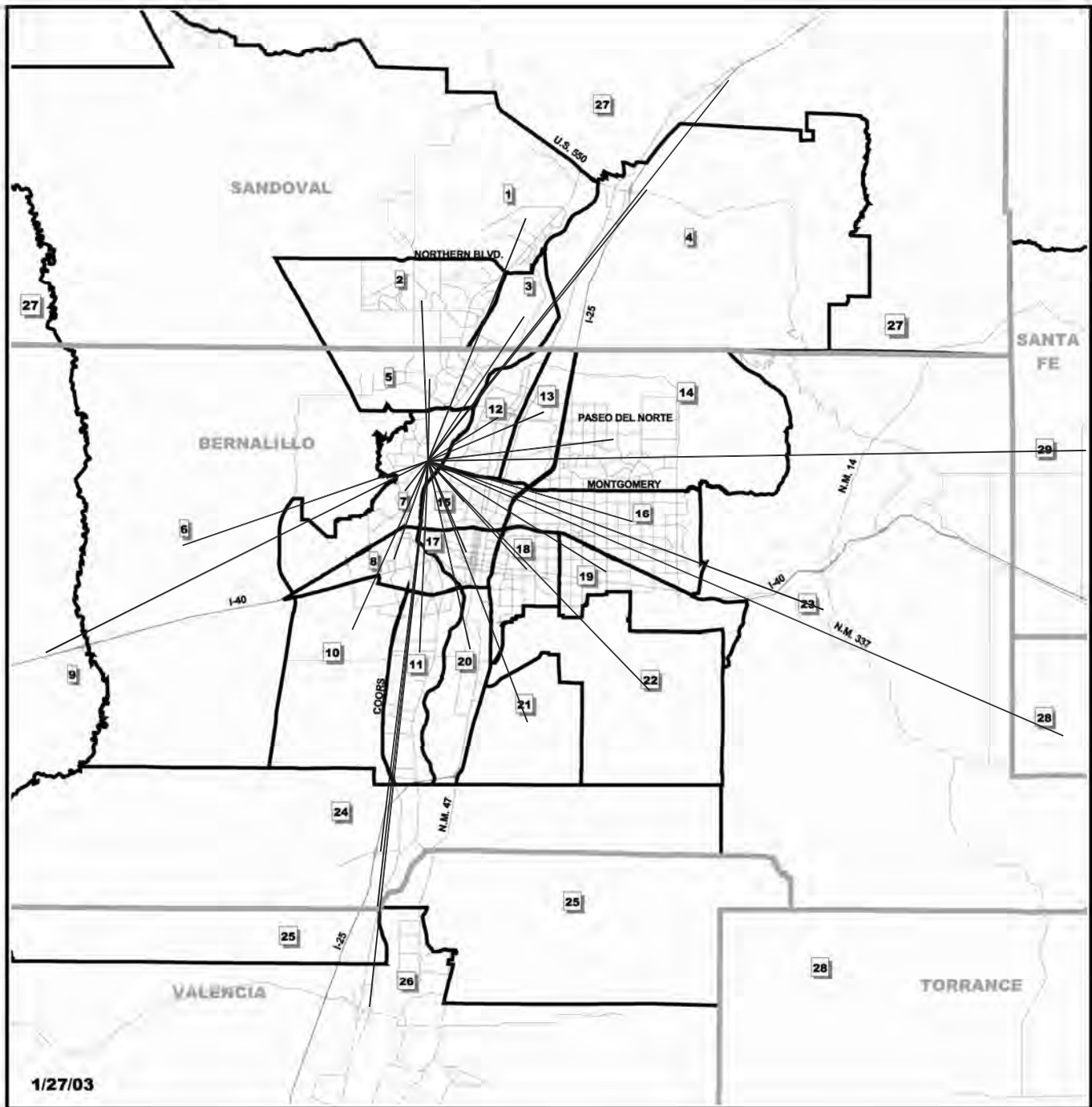


Figure 6

22 Subarea Identification Number

Subareas of the MRCOG Region



**Mid-Region
Council of Governments**
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Subarea boundaries extend to county boundary
where full extent of subarea not shown except for Subarea 29
which only includes southern Santa Fe County.

Trip Distribution Table
Andulicia, Tract 6 RETAILCOMMERCIAL (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial Trips**

2015 and 2025 Data Taken from Mid-Region Council of Governments'
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(CN) Coors Blvd North			(LE) La Orilla Rd East			(MPE) Montano Plaza East			(WN) Winterhaven Rd North		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year 2015	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015														
Boundary Specified on DASZ Map																		
6102	35%	1395	1352	1,395	488	1.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	3.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	3.12%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6113	95%	755	729	755	717	1.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6114	80%	772	745	772	618	1.67%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6115	40%	1400	1358	1,400	560	1.51%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6116	100%	788	771	788	788	2.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	80%	737	723	737	590	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	35%	868	847	868	304	0.82%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	100%	868	850	868	868	2.34%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	75%	833	804	833	625	1.69%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	100%	150	141	150	150	0.40%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	10%	610	595	610	61	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	30%	2181	2179	2,181	654	1.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6152	25%	897	866	897	224	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	6.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6212	55%	2378	2434	2,378	1,308	3.53%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6213	100%	731	718	731	731	1.97%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6216	65%	434	457	434	282	0.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6218	35%	2205	2126	2,205	772	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	40%	2555	2512	2,555	1,022	2.76%	100%	2.76%	1,022	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	95%	3194	3144	3,194	3,034	8.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	7.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6225	100%	1938	1907	1,938	1,938	5.23%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	90%	1637	1609	1,637	1,473	3.98%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6227	90%	1703	1652	1,703	1,533	4.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6228	50%	1819	1760	1,819	910	2.46%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	1.04%	0%	0.00%	0	0%	0.00%	0	10%	0.10%	38	90%	0.93%	346
6232	90%	714	699	714	643	1.74%	85%	1.47%	547	15%	0.26%	96	0%	0.00%	0	0%	0.00%	0
6241	45%	2616	2531	2,616	1,177	3.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	5.52%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	5.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6251	20%	1987	1944	1,987	397	1.07%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6252	100%	1403	1373	1,403	1,403	3.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	3.99%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	95%	124	117	124	118	0.32%	80%	0.25%	94	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
							51,359			37,055			100.00%					
										1,663			96			38		
										4.49%			0.26%			0.10%		
																346		
																0.93%		

Trip Distribution Table
Andulicia, Tract 6 RETAILCOMMERCIAL (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercia**

2015 and 2025 Data Taken from Mid-Region Council of Governments'
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(4N) Fourth St North			(ME) Montano Rd East			(4S) Fourth St South			(SE) Sevilla Ave East		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year 2015	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015														
Boundary Specified on DASZ Map																		
6102	35%	1395	1352	1,395	488	1.32%	0%	0.00%	0	0%	0.00%	0	100%	1.32%	488	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	3.60%	0%	0.00%	0	0%	0.00%	0	100%	3.60%	1,333	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	3.12%	0%	0.00%	0	0%	0.00%	0	100%	3.12%	1,157	0%	0.00%	0
6113	95%	755	729	755	717	1.93%	0%	0.00%	0	0%	0.00%	0	100%	1.93%	717	0%	0.00%	0
6114	80%	772	745	772	618	1.67%	0%	0.00%	0	0%	0.00%	0	100%	1.67%	618	0%	0.00%	0
6115	40%	1400	1358	1,400	560	1.51%	0%	0.00%	0	0%	0.00%	0	100%	1.51%	560	0%	0.00%	0
6116	100%	788	771	788	788	2.13%	0%	0.00%	0	0%	0.00%	0	100%	2.13%	788	0%	0.00%	0
6121	80%	737	723	737	590	1.59%	100%	1.59%	590	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	35%	868	847	868	304	0.82%	100%	0.82%	304	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	100%	868	850	868	868	2.34%	0%	0.00%	0	0%	0.00%	0	100%	2.34%	868	0%	0.00%	0
6124	75%	833	804	833	625	1.69%	100%	1.69%	625	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	100%	150	141	150	150	0.40%	100%	0.40%	150	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	10%	610	595	610	61	0.16%	100%	0.16%	61	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	30%	2181	2179	2,181	654	1.76%	0%	0.00%	0	0%	0.00%	0	100%	1.76%	654	0%	0.00%	0
6152	25%	897	866	897	224	0.60%	0%	0.00%	0	0%	0.00%	0	100%	0.60%	224	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	6.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6212	55%	2378	2434	2,378	1,308	3.53%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6213	100%	731	718	731	731	1.97%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6216	65%	434	457	434	282	0.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6218	35%	2205	2126	2,205	772	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	40%	2555	2512	2,555	1,022	2.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	95%	3194	3144	3,194	3,034	8.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	7.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6225	100%	1938	1907	1,938	1,938	5.23%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	90%	1637	1609	1,637	1,473	3.98%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6227	90%	1703	1652	1,703	1,533	4.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6228	50%	1819	1760	1,819	910	2.46%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	1.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	90%	714	699	714	643	1.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6241	45%	2616	2531	2,616	1,177	3.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	5.52%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	5.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6251	20%	1987	1944	1,987	397	1.07%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6252	100%	1403	1373	1,403	1,403	3.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	3.99%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	90%	3.59%	1,330
6262	95%	124	117	124	118	0.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
							51,359			37,055			100.00%					
										1,730			-			7,407		
										4.67%			0.00%			19.99%		
																1,330		
																3.59%		

Trip Distribution Table
Andulicia, Tract 6 RETAILCOMMERCIAL (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial**

2015 and 2025 Data Taken from Mid-Region Council of Governments'
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(WE) Western Trail East			(CS) Coors Blvd South			(WW) Western Trail West			(SW) Sevilla Ave West		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year 2015	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015														
Boundary Specified on DASZ Map																		
6102	35%	1395	1352	1,395	488	1.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	3.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	3.12%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6113	95%	755	729	755	717	1.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6114	80%	772	745	772	618	1.67%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6115	40%	1400	1358	1,400	560	1.51%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6116	100%	788	771	788	788	2.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	80%	737	723	737	590	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	35%	868	847	868	304	0.82%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	100%	868	850	868	868	2.34%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	75%	833	804	833	625	1.69%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	100%	150	141	150	150	0.40%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	10%	610	595	610	61	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	30%	2181	2179	2,181	654	1.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6152	25%	897	866	897	224	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	6.66%	0%	0.00%	0	0%	0.00%	0	50%	3.33%	1,235	15%	1.00%	370
6212	55%	2378	2434	2,378	1,308	3.53%	0%	0.00%	0	85%	3.00%	1,112	15%	0.53%	196	0%	0.00%	0
6213	100%	731	718	731	731	1.97%	0%	0.00%	0	50%	0.99%	366	50%	0.99%	366	0%	0.00%	0
6216	65%	434	457	434	282	0.76%	0%	0.00%	0	100%	0.76%	282	0%	0.00%	0	0%	0.00%	0
6218	35%	2205	2126	2,205	772	2.08%	0%	0.00%	0	100%	2.08%	772	0%	0.00%	0	0%	0.00%	0
6221	40%	2555	2512	2,555	1,022	2.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	95%	3194	3144	3,194	3,034	8.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	7.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6225	100%	1938	1907	1,938	1,938	5.23%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	90%	1637	1609	1,637	1,473	3.98%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6227	90%	1703	1652	1,703	1,533	4.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6228	50%	1819	1760	1,819	910	2.46%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	1.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	90%	714	699	714	643	1.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6241	45%	2616	2531	2,616	1,177	3.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	5.52%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	5.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6251	20%	1987	1944	1,987	397	1.07%	0%	0.00%	0	100%	1.07%	397	0%	0.00%	0	0%	0.00%	0
6252	100%	1403	1373	1,403	1,403	3.79%	15%	0.57%	210	85%	3.22%	1,193	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	3.99%	10%	0.40%	148	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	95%	124	117	124	118	0.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
							51,359			37,055			100.00%					
										358			4,121			1,796		
										0.97%			11.12%			4.85%		
																370		
																1.00%		

Trip Distribution Table
Andulicia, Tract 6 RETAILCOMMERCIAL (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial**

2015 and 2025 Data Taken from Mid-Region Council of Governments'
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(DW) Dellyne Ave West			(MW) Montano Rd West			(MPW) Montano Plaza West			(LW) La Orilla Rd West			
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	
		2015	2025	2015															
Boundary Specified on DASZ Map																			
6102	35%	1395	1352	1,395	488	1.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6111	100%	1333	1290	1,333	1,333	3.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6112	100%	1157	1123	1,157	1,157	3.12%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6113	95%	755	729	755	717	1.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6114	80%	772	745	772	618	1.67%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6115	40%	1400	1358	1,400	560	1.51%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6116	100%	788	771	788	788	2.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6121	80%	737	723	737	590	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6122	35%	868	847	868	304	0.82%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6123	100%	868	850	868	868	2.34%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6124	75%	833	804	833	625	1.69%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6125	100%	150	141	150	150	0.40%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6131	10%	610	595	610	61	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6141	30%	2181	2179	2,181	654	1.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6152	25%	897	866	897	224	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6211	100%	2469	2384	2,469	2,469	6.66%	35%	2.33%	864	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6212	55%	2378	2434	2,378	1,308	3.53%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6213	100%	731	718	731	731	1.97%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6216	65%	434	457	434	282	0.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6218	35%	2205	2126	2,205	772	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6221	40%	2555	2512	2,555	1,022	2.76%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6222	95%	3194	3144	3,194	3,034	8.19%	0%	0.00%	0	100%	8.19%	3,034	0%	0.00%	0	0%	0.00%	0	
6224	100%	2664	2574	2,664	2,664	7.19%	0%	0.00%	0	30%	2.16%	799	35%	2.52%	932	35%	2.52%	932	
6225	100%	1938	1907	1,938	1,938	5.23%	0%	0.00%	0	100%	5.23%	1,938	0%	0.00%	0	0%	0.00%	0	
6226	90%	1637	1609	1,637	1,473	3.98%	0%	0.00%	0	100%	3.98%	1,473	0%	0.00%	0	0%	0.00%	0	
6227	90%	1703	1652	1,703	1,533	4.14%	0%	0.00%	0	100%	4.14%	1,533	0%	0.00%	0	0%	0.00%	0	
6228	50%	1819	1760	1,819	910	2.46%	0%	0.00%	0	100%	2.46%	910	0%	0.00%	0	0%	0.00%	0	
6231	100%	384	382	384	384	1.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6232	90%	714	699	714	643	1.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6241	45%	2616	2531	2,616	1,177	3.18%	100%	3.18%	1,177	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6242	100%	2044	2020	2,044	2,044	5.52%	50%	2.76%	1,022	50%	2.76%	1,022	0%	0.00%	0	0%	0.00%	0	
6243	100%	2138	2078	2,138	2,138	5.77%	50%	2.88%	1,069	50%	2.88%	1,069	0%	0.00%	0	0%	0.00%	0	
6251	20%	1987	1944	1,987	397	1.07%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6252	100%	1403	1373	1,403	1,403	3.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6253	100%	1478	2183	1,478	1,478	3.99%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6262	95%	124	117	124	118	0.32%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	20%	0.06%	24	
							51,359			4,132 11.15%			11,778 31.79%			932 2.52%			956 2.58%

Trip Distribution Table
Andalucia, Tract 6 WALMART STORE (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for ProposedWalmart Store Trips

2015 and 2025 Data Taken from Mid-Region Council of Governments
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(CN) Coors Blvd North			(LE) La Orilla Rd East			(MPE) Montano Plaza East			(WN) Winterhaven Rd North			(4N) Fourth St North			(ME) Montano Rd East		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015																				
Boundary Specified on DASZ Map																								
6002	10%	1364	1380	1,364	136	0.26%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6011	40%	542	608	542	217	0.42%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6012	65%	954	942	954	620	1.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6021	85%	2238	2252	2,238	1,902	3.64%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6032	20%	651	629	651	130	0.25%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.25%	130
6033	50%	561	579	561	281	0.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	5%	0.03%	14
6034	100%	449	479	449	449	0.86%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	95%	0.82%	427	5%	0.04%	22
6041	100%	1162	1155	1,162	1,162	2.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	2.22%	1,162	0%	0.00%	0
6042	45%	513	514	513	231	0.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.44%	231	0%	0.00%	0
6045	45%	758	732	758	341	0.65%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.65%	341	0%	0.00%	0
6046	95%	638	620	638	606	1.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.16%	606	0%	0.00%	0
6081	25%	355	341	355	89	0.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.17%	89	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	2.55%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	2.21%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6113	100%	755	729	755	755	1.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6114	100%	772	745	772	772	1.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6115	95%	1400	1358	1,400	1,330	2.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6116	70%	788	771	788	552	1.06%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	100%	737	723	737	737	1.41%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.41%	737	0%	0.00%	0
6122	100%	868	847	868	868	1.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.66%	868	0%	0.00%	0
6123	100%	868	850	868	868	1.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	100%	833	804	833	833	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.59%	833	0%	0.00%	0
6125	100%	150	141	150	150	0.29%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.29%	150	0%	0.00%	0
6131	100%	610	595	610	610	1.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.17%	610	0%	0.00%	0
6132	100%	772	768	772	772	1.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.48%	772	0%	0.00%	0
6141	100%	2181	2179	2,181	2,181	4.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6142	100%	550	621	550	550	1.05%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	1.05%	550	0%	0.00%	0
6153	5%	1640	1589	1,640	82	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	4.72%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6212	25%	2378	2434	2,378	595	1.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6213	55%	731	718	731	402	0.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	55%	2555	2512	2,555	1,405	2.69%	100%	2.69%	1,405	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	100%	3194	3144	3,194	3,194	6.11%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6223	85%	996	962	996	847	1.62%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	5.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6225	100%	1938	1907	1,938	1,938	3.71%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	100%	1637	1609	1,637	1,637	3.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6227	100%	1703	1652	1,703	1,703	3.26%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6228	100%	1819	1760	1,819	1,819	3.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	0.73%	0%	0.00%	0	0%	0.00%	0	10%	0.07%	38	90%	0.66%	346	0%	0.00%	0	0%	0.00%	0
6232	100%	714	699	714	714	1.37%	85%	1.16%	607	15%	0.20%	107	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	20%	968	1069	968	194	0.37%	100%	0.37%	194	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6241	100%	2616	2531	2,616	2,616	5.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	3.91%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	4.09%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6252	50%	1403	1373	1,403	702	1.34%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	2.83%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	100%	124	117	124	124	0.24%	80%	0.19%	99	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6312	100%	1923	3502	1,923	1,923	3.68%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6313	100%	0	2064	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6334	55%	1895	2192	1,895	1,042	1.99%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6335	85%	454	438	454	386	0.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6396	10%	1154	2168	1,154	115	0.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	166	8	0.02%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.02%	8	0%	0.00%	0
6543	5%	451	533	451	23	0.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	100%	0.04%	23	0%	0.00%	0
							65,595			52,278			100.00%											
							2,305			107			38			346			7,407			167		
							4.41%			0.20%			0.07%			0.66%			14.17%			0.32%		

Trip Distribution Table
Andalucia, Tract 6 WALMART STORE (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for ProposedWalmart Store Trip

2015 and 2025 Data Taken from Mid-Region Council of Governments
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(4S) Fourth St South			(SE) Sevilla Ave East			(WE) Western Trail East			(CS) Coors Blvd South			(WW) Western Trail West			(SW) Sevilla Ave West		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015																				
Boundary Specified on DASZ Map																								
6002	10%	1364	1380	1,364	136	0.26%	100%	0.26%	136	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6011	40%	542	608	542	217	0.42%	100%	0.42%	217	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6012	65%	954	942	954	620	1.19%	100%	1.19%	620	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6021	85%	2238	2252	2,238	1,902	3.64%	100%	3.64%	1,902	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6032	20%	651	629	651	130	0.25%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6033	50%	561	579	561	281	0.54%	95%	0.51%	267	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6034	100%	449	479	449	449	0.86%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6041	100%	1162	1155	1,162	1,162	2.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6042	45%	513	514	513	231	0.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6045	45%	758	732	758	341	0.65%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6046	95%	638	620	638	606	1.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6081	25%	355	341	355	89	0.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	2.55%	100%	2.55%	1,333	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	2.21%	100%	2.21%	1,157	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6113	100%	755	729	755	755	1.44%	100%	1.44%	755	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6114	100%	772	745	772	772	1.48%	100%	1.48%	772	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6115	95%	1400	1358	1,400	1,330	2.54%	100%	2.54%	1,330	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6116	70%	788	771	788	552	1.06%	100%	1.06%	552	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	100%	737	723	737	737	1.41%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	100%	868	847	868	868	1.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	100%	868	850	868	868	1.66%	100%	1.66%	868	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	100%	833	804	833	833	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	100%	150	141	150	150	0.29%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	100%	610	595	610	610	1.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6132	100%	772	768	772	772	1.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	100%	2181	2179	2,181	2,181	4.17%	100%	4.17%	2,181	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6142	100%	550	621	550	550	1.05%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6153	5%	1640	1589	1,640	82	0.16%	100%	0.16%	82	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	4.72%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	50%	2.36%	1,235	15%	0.71%	370
6212	25%	2378	2434	2,378	595	1.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	85%	0.97%	506	15%	0.17%	89	0%	0.00%	0
6213	55%	731	718	731	402	0.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	50%	0.38%	201	50%	0.38%	201	0%	0.00%	0
6221	55%	2555	2512	2,555	1,405	2.69%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	100%	3194	3144	3,194	3,194	6.11%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6223	85%	996	962	996	847	1.62%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	5.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6225	100%	1938	1907	1,938	1,938	3.71%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	100%	1637	1609	1,637	1,637	3.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6227	100%	1703	1652	1,703	1,703	3.26%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6228	100%	1819	1760	1,819	1,819	3.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	0.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	100%	714	699	714	714	1.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	20%	968	1069	968	194	0.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6241	100%	2616	2531	2,616	2,616	5.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	3.91%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	4.09%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6252	50%	1403	1373	1,403	702	1.34%	0%	0.00%	0	0%	0.00%	0	15%	0.20%	105	85%	1.14%	597	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	2.83%	0%	0.00%	0	90%	2.54%	1,330	10%	0.28%	148	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	100%	124	117	124	124	0.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6312	100%	1923	3502	1,923	1,923	3.68%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6313	100%	0	2064	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6334	55%	1895	2192	1,895	1,042	1.99%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6335	85%	454	438	454	386	0.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6396	10%	1154	2168	1,154	115	0.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	166	8	0.02%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6543	5%	451	533	451	23	0.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
									12,172			1,330			253			1,303			1,525			370
									23.28%			2.54%			0.48%			2.49%			2.92%			0.71%

Trip Distribution Table
Andalucia, Tract 6 WALMART STORE (Montano / Coors)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for ProposedWalmart Store Trip

2015 and 2025 Data Taken from Mid-Region Council of Governments
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(DW) Dellyne Ave West			(MW) Montano Rd West			(MPW) Montano Plaza West			(LW) La Orilla Rd West		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015														
Boundary Specified on DASZ Map																		
6002	10%	1364	1380	1,364	136	0.26%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6011	40%	542	608	542	217	0.42%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6012	65%	954	942	954	620	1.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6021	85%	2238	2252	2,238	1,902	3.64%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6032	20%	651	629	651	130	0.25%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6033	50%	561	579	561	281	0.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6034	100%	449	479	449	449	0.86%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6041	100%	1162	1155	1,162	1,162	2.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6042	45%	513	514	513	231	0.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6045	45%	758	732	758	341	0.65%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6046	95%	638	620	638	606	1.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6081	25%	355	341	355	89	0.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6111	100%	1333	1290	1,333	1,333	2.55%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6112	100%	1157	1123	1,157	1,157	2.21%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6113	100%	755	729	755	755	1.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6114	100%	772	745	772	772	1.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6115	95%	1400	1358	1,400	1,330	2.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6116	70%	788	771	788	552	1.06%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	100%	737	723	737	737	1.41%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	100%	868	847	868	868	1.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	100%	868	850	868	868	1.66%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	100%	833	804	833	833	1.59%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	100%	150	141	150	150	0.29%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	100%	610	595	610	610	1.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6132	100%	772	768	772	772	1.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	100%	2181	2179	2,181	2,181	4.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6142	100%	550	621	550	550	1.05%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6153	5%	1640	1589	1,640	82	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6211	100%	2469	2384	2,469	2,469	4.72%	35%	1.65%	864	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6212	25%	2378	2434	2,378	595	1.14%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6213	55%	731	718	731	402	0.77%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	55%	2555	2512	2,555	1,405	2.69%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	100%	3194	3144	3,194	3,194	6.11%	0%	0.00%	0	100%	6.11%	3,194	0%	0.00%	0	0%	0.00%	0
6223	85%	996	962	996	847	1.62%	0%	0.00%	0	100%	1.62%	847	0%	0.00%	0	0%	0.00%	0
6224	100%	2664	2574	2,664	2,664	5.10%	0%	0.00%	0	30%	1.53%	799	35%	1.78%	932	35%	1.78%	932
6225	100%	1938	1907	1,938	1,938	3.71%	0%	0.00%	0	100%	3.71%	1,938	0%	0.00%	0	0%	0.00%	0
6226	100%	1637	1609	1,637	1,637	3.13%	0%	0.00%	0	100%	3.13%	1,637	0%	0.00%	0	0%	0.00%	0
6227	100%	1703	1652	1,703	1,703	3.26%	0%	0.00%	0	100%	3.26%	1,703	0%	0.00%	0	0%	0.00%	0
6228	100%	1819	1760	1,819	1,819	3.48%	0%	0.00%	0	100%	3.48%	1,819	0%	0.00%	0	0%	0.00%	0
6231	100%	384	382	384	384	0.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	100%	714	699	714	714	1.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	20%	968	1069	968	194	0.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6241	100%	2616	2531	2,616	2,616	5.00%	100%	5.00%	2,616	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6242	100%	2044	2020	2,044	2,044	3.91%	50%	1.95%	1,022	50%	1.95%	1,022	0%	0.00%	0	0%	0.00%	0
6243	100%	2138	2078	2,138	2,138	4.09%	50%	2.04%	1,069	50%	2.04%	1,069	0%	0.00%	0	0%	0.00%	0
6252	50%	1403	1373	1,403	702	1.34%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6253	100%	1478	2183	1,478	1,478	2.83%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	100%	124	117	124	124	0.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	20%	0.05%	25
6312	100%	1923	3502	1,923	1,923	3.68%	0%	0.00%	0	100%	3.68%	1,923	0%	0.00%	0	0%	0.00%	0
6313	100%	0	2064	0	0	0.00%	0%	0.00%	0	100%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6334	55%	1895	2192	1,895	1,042	1.99%	0%	0.00%	0	100%	1.99%	1,042	0%	0.00%	0	0%	0.00%	0
6335	85%	454	438	454	386	0.74%	0%	0.00%	0	100%	0.74%	386	0%	0.00%	0	0%	0.00%	0
6396	10%	1154	2168	1,154	115	0.22%	0%	0.00%	0	100%	0.22%	115	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	166	8	0.02%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6543	5%	451	533	451	23	0.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				65,595	52,278	100.00%				5,571 10.66%				17,494 33.46%				957 1.83%

Trip Distribution Table

Andalucia, Tract 6 Update (Montano Rd / Coors Blvd)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed Residential Development Trips

2015 and 2025 Data Taken from Mid-Region Council of Governments' 2035
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

								(CN) Coors Blvd North			(LE) La Orilla Rd East			(MPE) Montano Plaza East			(WN) Winterhaven Rd North		
Sub Area I.D.#	% Sub Area in Study	2015 Employment	2025 Employment	Interpolated Employment for the Year 2015	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
1	100%	12,703	25,695	12,703	12,703	11.1	1,144	100%	1.58%	1,144	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	18,552	22,669	18,552	18,552	6.8	2,728	100%	3.78%	2,728	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	1,515	1,695	1,515	1,515	7.4	205	100%	0.28%	205	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	3,740	4,392	3,740	3,740	14.8	253	100%	0.35%	253	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	16,599	25,368	16,599	16,599	3.5	4,743	70%	4.60%	3,320	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	1,853	8,317	1,853	1,853	11	168	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7*	100%	9,714	15,525	9,714	9,714	1.6	6,071	5%	0.42%	304	0%	0.00%	0	0%	0.00%	0	4%	0.34%	243
8	100%	10,946	16,047	10,946	10,946	4.4	2,488	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	1,745	2,012	1,745	1,745	18.2	96	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	3,782	7,258	3,782	3,782	7.9	479	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	6,376	7,317	6,376	6,376	8.2	778	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	6,731	7,304	6,731	6,731	3.5	1,923	45%	1.20%	865	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	40,930	43,430	40,930	40,930	5.4	7,580	50%	5.25%	3,790	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	37,316	40,591	37,316	37,316	7.9	4,724	50%	3.27%	2,362	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	16,633	17,690	16,633	16,633	2.3	7,232	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	62,474	65,263	62,474	62,474	9.1	6,865	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	39,102	39,919	39,102	39,102	4.2	9,310	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	46,080	50,268	46,080	46,080	6.2	7,432	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	28,254	29,328	28,254	28,254	8.9	3,175	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20	100%	7,602	9,770	7,602	7,602	8.2	927	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	1,392	21,398	1,392	1,392	11.9	117	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	28,721	30,372	28,721	28,721	13.6	2,112	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	2,916	4,611	2,916	2,916	18	162	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,337	2,604	2,337	2,337	16.7	140	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	207	231	207	207	19.1	11	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	19,091	27,014	19,091	19,091	23.4	816	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	6,750	7,930	6,750	6,750	20.7	326	100%	0.45%	326	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	4,759	5,816	4,759	4,759	29.5	161	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	2,042	2,773	2,042	2,042	28	73	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		440,862	542,607	440,862	440,862		72,237		21.18%	15,297 21.18%		0.00%	0 0.00%		0.00%	0 0.00%		0.34%	243 0.34%

* - Subarea in which the site it located.

Trip Distribution Table
Andalucia, Tract 6 Update (Montano Rd / Coors Blvd)

Sub Area Employment Data:
For determination of Trip Distribution for Proposed Residential Development Trips

2015 and 2025 Data Taken from Mid-Region Council of Governments' 2035
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

								(4N) Fourth St North			(ME) Montano Rd East			(4S) Fourth St South			(SE) Sevilla Ave East		
Sub Area I.D.#	% Sub Area in Study	2015 Employment	2025 Employment	Interpolated Employment for the Year 2015	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
1	100%	12,703	25,695	12,703	12,703	11.1	1,144	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	18,552	22,669	18,552	18,552	6.8	2,728	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	1,515	1,695	1,515	1,515	7.4	205	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	3,740	4,392	3,740	3,740	14.8	253	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	16,599	25,368	16,599	16,599	3.5	4,743	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	1,853	8,317	1,853	1,853	11	168	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7*	100%	9,714	15,525	9,714	9,714	1.6	6,071	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8	100%	10,946	16,047	10,946	10,946	4.4	2,488	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	1,745	2,012	1,745	1,745	18.2	96	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	3,782	7,258	3,782	3,782	7.9	479	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	6,376	7,317	6,376	6,376	8.2	778	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	6,731	7,304	6,731	6,731	3.5	1,923	25%	0.67%	481	15%	0.40%	288	15%	0.40%	288	0%	0.00%	0
13	100%	40,930	43,430	40,930	40,930	5.4	7,580	0%	0.00%	0	50%	5.25%	3,790	0%	0.00%	0	0%	0.00%	0
14	100%	37,316	40,591	37,316	37,316	7.9	4,724	0%	0.00%	0	50%	3.27%	2,362	0%	0.00%	0	0%	0.00%	0
15	100%	16,633	17,690	16,633	16,633	2.3	7,232	0%	0.00%	0	15%	1.50%	1,085	50%	5.01%	3,616	0%	0.00%	0
16	100%	62,474	65,263	62,474	62,474	9.1	6,865	0%	0.00%	0	50%	4.75%	3,433	0%	0.00%	0	0%	0.00%	0
17	100%	39,102	39,919	39,102	39,102	4.2	9,310	0%	0.00%	0	20%	2.58%	1,862	0%	0.00%	0	0%	0.00%	0
18	100%	46,080	50,268	46,080	46,080	6.2	7,432	0%	0.00%	0	20%	2.06%	1,486	0%	0.00%	0	0%	0.00%	0
19	100%	28,254	29,328	28,254	28,254	8.9	3,175	0%	0.00%	0	50%	2.20%	1,587	0%	0.00%	0	0%	0.00%	0
20	100%	7,602	9,770	7,602	7,602	8.2	927	0%	0.00%	0	50%	0.64%	464	0%	0.00%	0	0%	0.00%	0
21	100%	1,392	21,398	1,392	1,392	11.9	117	0%	0.00%	0	50%	0.08%	58	0%	0.00%	0	0%	0.00%	0
22	100%	28,721	30,372	28,721	28,721	13.6	2,112	0%	0.00%	0	50%	1.46%	1,056	0%	0.00%	0	0%	0.00%	0
23	100%	2,916	4,611	2,916	2,916	18	162	0%	0.00%	0	50%	0.11%	81	0%	0.00%	0	0%	0.00%	0
24	100%	2,337	2,604	2,337	2,337	16.7	140	0%	0.00%	0	50%	0.10%	70	0%	0.00%	0	0%	0.00%	0
25	100%	207	231	207	207	19.1	11	0%	0.00%	0	50%	0.01%	5	0%	0.00%	0	0%	0.00%	0
26	100%	19,091	27,014	19,091	19,091	23.4	816	0%	0.00%	0	50%	0.56%	408	0%	0.00%	0	0%	0.00%	0
27	100%	6,750	7,930	6,750	6,750	20.7	326	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	4,759	5,816	4,759	4,759	29.5	161	0%	0.00%	0	50%	0.11%	81	0%	0.00%	0	0%	0.00%	0
29	100%	2,042	2,773	2,042	2,042	28	73	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		440,862	542,607	440,862	440,862		72,237			481			18,116			3,904			0
									0.67%	0.67%		25.08%	25.08%		5.40%	5.40%		0.00%	0.00%

* - Subarea in which the site it located.

Trip Distribution Table
Andalucia, Tract 6 Update (Montano Rd / Coors Blvd)

Sub Area Employment Data:
For determination of Trip Distribution for Proposed **Residential Development Trips**

2015 and 2025 Data Taken from Mid-Region Council of Governments' 2035
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

								(WE) Western Trail East			(CS) Coors Blvd South			(WW) Western Trail West			(SW) Sevilla Ave West		
Sub Area I.D.#	% Sub Area in Study	2015 Employment	2025 Employment	Interpolated Employment for the Year 2015	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
1	100%	12,703	25,695	12,703	12,703	11.1	1,144	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	18,552	22,669	18,552	18,552	6.8	2,728	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	1,515	1,695	1,515	1,515	7.4	205	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	3,740	4,392	3,740	3,740	14.8	253	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	16,599	25,368	16,599	16,599	3.5	4,743	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	1,853	8,317	1,853	1,853	11	168	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7*	100%	9,714	15,525	9,714	9,714	1.6	6,071	2%	0.17%	121	63%	5.29%	3,825	8%	0.67%	486	0%	0.00%	0
8	100%	10,946	16,047	10,946	10,946	4.4	2,488	0%	0.00%	0	100%	3.44%	2,488	0%	0.00%	0	0%	0.00%	0
9	100%	1,745	2,012	1,745	1,745	18.2	96	0%	0.00%	0	100%	0.13%	96	0%	0.00%	0	0%	0.00%	0
10	100%	3,782	7,258	3,782	3,782	7.9	479	0%	0.00%	0	100%	0.66%	479	0%	0.00%	0	0%	0.00%	0
11	100%	6,376	7,317	6,376	6,376	8.2	778	0%	0.00%	0	100%	1.08%	778	0%	0.00%	0	0%	0.00%	0
12	100%	6,731	7,304	6,731	6,731	3.5	1,923	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	40,930	43,430	40,930	40,930	5.4	7,580	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	37,316	40,591	37,316	37,316	7.9	4,724	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	16,633	17,690	16,633	16,633	2.3	7,232	0%	0.00%	0	35%	3.50%	2,531	0%	0.00%	0	0%	0.00%	0
16	100%	62,474	65,263	62,474	62,474	9.1	6,865	0%	0.00%	0	50%	4.75%	3,433	0%	0.00%	0	0%	0.00%	0
17	100%	39,102	39,919	39,102	39,102	4.2	9,310	0%	0.00%	0	80%	10.31%	7,448	0%	0.00%	0	0%	0.00%	0
18	100%	46,080	50,268	46,080	46,080	6.2	7,432	0%	0.00%	0	80%	8.23%	5,946	0%	0.00%	0	0%	0.00%	0
19	100%	28,254	29,328	28,254	28,254	8.9	3,175	0%	0.00%	0	50%	2.20%	1,587	0%	0.00%	0	0%	0.00%	0
20	100%	7,602	9,770	7,602	7,602	8.2	927	0%	0.00%	0	50%	0.64%	464	0%	0.00%	0	0%	0.00%	0
21	100%	1,392	21,398	1,392	1,392	11.9	117	0%	0.00%	0	50%	0.08%	58	0%	0.00%	0	0%	0.00%	0
22	100%	28,721	30,372	28,721	28,721	13.6	2,112	0%	0.00%	0	50%	1.46%	1,056	0%	0.00%	0	0%	0.00%	0
23	100%	2,916	4,611	2,916	2,916	18	162	0%	0.00%	0	50%	0.11%	81	0%	0.00%	0	0%	0.00%	0
24	100%	2,337	2,604	2,337	2,337	16.7	140	0%	0.00%	0	50%	0.10%	70	0%	0.00%	0	0%	0.00%	0
25	100%	207	231	207	207	19.1	11	0%	0.00%	0	50%	0.01%	5	0%	0.00%	0	0%	0.00%	0
26	100%	19,091	27,014	19,091	19,091	23.4	816	0%	0.00%	0	50%	0.56%	408	0%	0.00%	0	0%	0.00%	0
27	100%	6,750	7,930	6,750	6,750	20.7	326	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	4,759	5,816	4,759	4,759	29.5	161	0%	0.00%	0	50%	0.11%	81	0%	0.00%	0	0%	0.00%	0
29	100%	2,042	2,773	2,042	2,042	28	73	0%	0.00%	0	100%	0.10%	73	0%	0.00%	0	0%	0.00%	0
		440,862	542,607	440,862	440,862		72,237		0.17%	121		42.78%	30,905		0.67%	486		0.00%	0
										0.17%			42.78%			0.67%			0.00%

* - Subarea in which the site it located.

Trip Distribution Table
Andalucia, Tract 6 Update (Montano Rd / Coors Blvd)

Sub Area Employment Data:
For determination of Trip Distribution for Proposed **Residential Development Trips**

*2015 and 2025 Data Taken from Mid-Region Council of Governments' 2035
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico*

								(DW) Dellyne Ave West			(MW) Montano Rd West		
Sub Area I.D.#	% Sub Area in Study	2015 Employment	2025 Employment	Interpolated Employment for the Year 2015	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025										
1	100%	12,703	25,695	12,703	12,703	11.1	1,144	0%	0.00%	0	0%	0.00%	0
2	100%	18,552	22,669	18,552	18,552	6.8	2,728	0%	0.00%	0	0%	0.00%	0
3	100%	1,515	1,695	1,515	1,515	7.4	205	0%	0.00%	0	0%	0.00%	0
4	100%	3,740	4,392	3,740	3,740	14.8	253	0%	0.00%	0	0%	0.00%	0
5	100%	16,599	25,368	16,599	16,599	3.5	4,743	0%	0.00%	0	30%	1.97%	1,423
6	100%	1,853	8,317	1,853	1,853	11	168	0%	0.00%	0	100%	0.23%	168
7*	100%	9,714	15,525	9,714	9,714	1.6	6,071	2%	0.17%	121	14%	1.18%	850
8	100%	10,946	16,047	10,946	10,946	4.4	2,488	0%	0.00%	0	0%	0.00%	0
9	100%	1,745	2,012	1,745	1,745	18.2	96	0%	0.00%	0	0%	0.00%	0
10	100%	3,782	7,258	3,782	3,782	7.9	479	0%	0.00%	0	0%	0.00%	0
11	100%	6,376	7,317	6,376	6,376	8.2	778	0%	0.00%	0	0%	0.00%	0
12	100%	6,731	7,304	6,731	6,731	3.5	1,923	0%	0.00%	0	0%	0.00%	0
13	100%	40,930	43,430	40,930	40,930	5.4	7,580	0%	0.00%	0	0%	0.00%	0
14	100%	37,316	40,591	37,316	37,316	7.9	4,724	0%	0.00%	0	0%	0.00%	0
15	100%	16,633	17,690	16,633	16,633	2.3	7,232	0%	0.00%	0	0%	0.00%	0
16	100%	62,474	65,263	62,474	62,474	9.1	6,865	0%	0.00%	0	0%	0.00%	0
17	100%	39,102	39,919	39,102	39,102	4.2	9,310	0%	0.00%	0	0%	0.00%	0
18	100%	46,080	50,268	46,080	46,080	6.2	7,432	0%	0.00%	0	0%	0.00%	0
19	100%	28,254	29,328	28,254	28,254	8.9	3,175	0%	0.00%	0	0%	0.00%	0
20	100%	7,602	9,770	7,602	7,602	8.2	927	0%	0.00%	0	0%	0.00%	0
21	100%	1,392	21,398	1,392	1,392	11.9	117	0%	0.00%	0	0%	0.00%	0
22	100%	28,721	30,372	28,721	28,721	13.6	2,112	0%	0.00%	0	0%	0.00%	0
23	100%	2,916	4,611	2,916	2,916	18	162	0%	0.00%	0	0%	0.00%	0
24	100%	2,337	2,604	2,337	2,337	16.7	140	0%	0.00%	0	0%	0.00%	0
25	100%	207	231	207	207	19.1	11	0%	0.00%	0	0%	0.00%	0
26	100%	19,091	27,014	19,091	19,091	23.4	816	0%	0.00%	0	0%	0.00%	0
27	100%	6,750	7,930	6,750	6,750	20.7	326	0%	0.00%	0	0%	0.00%	0
28	100%	4,759	5,816	4,759	4,759	29.5	161	0%	0.00%	0	0%	0.00%	0
29	100%	2,042	2,773	2,042	2,042	28	73	0%	0.00%	0	0%	0.00%	0
		440,862	542,607	440,862	440,862		72,237		0.17%	121		3.38%	2,441
										0.17%			3.38%

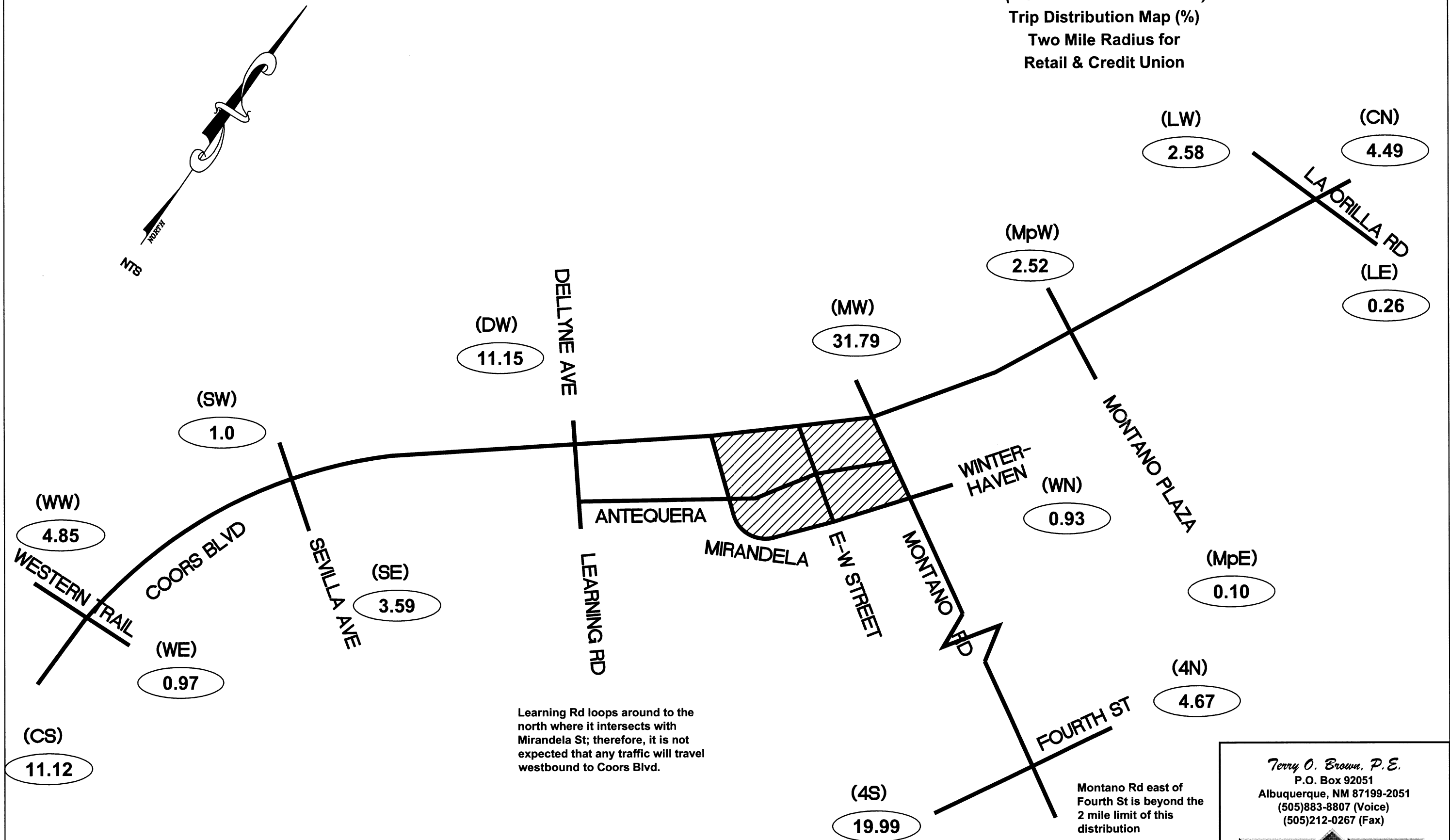
* - Subarea in which the site it located.

Walmart Development

(Montano Rd / Coors Blvd)

Trip Distribution Map (%)

Two Mile Radius for
Retail & Credit Union



Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

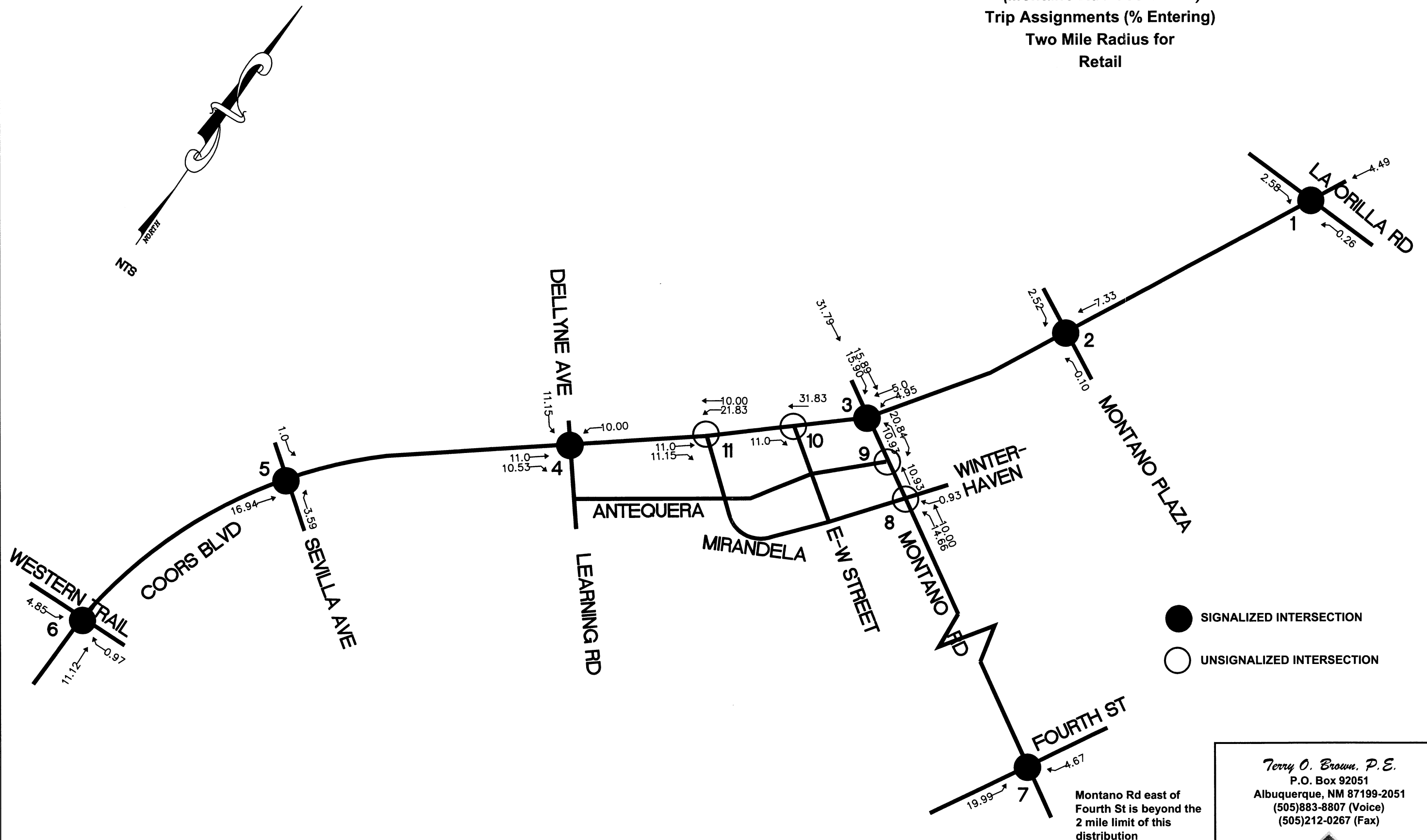
Walmart Development

(Montano Rd / Coors Blvd)

Trip Assignments (% Entering)

Two Mile Radius for

Retail



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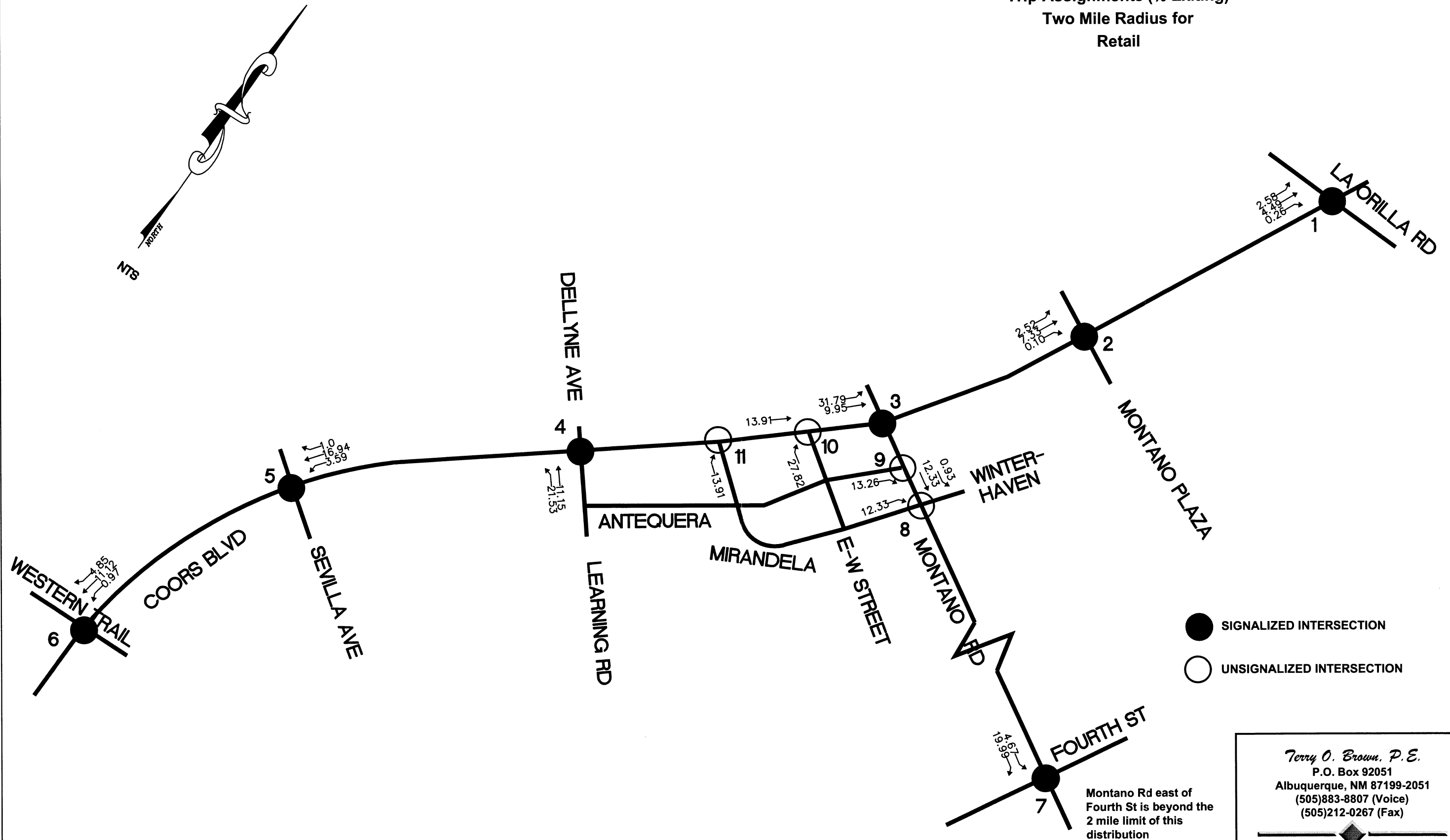
Walmart Development

(Montano Rd / Coors Blvd)

Trip Assignments (% Exiting)

Two Mile Radius for

Retail



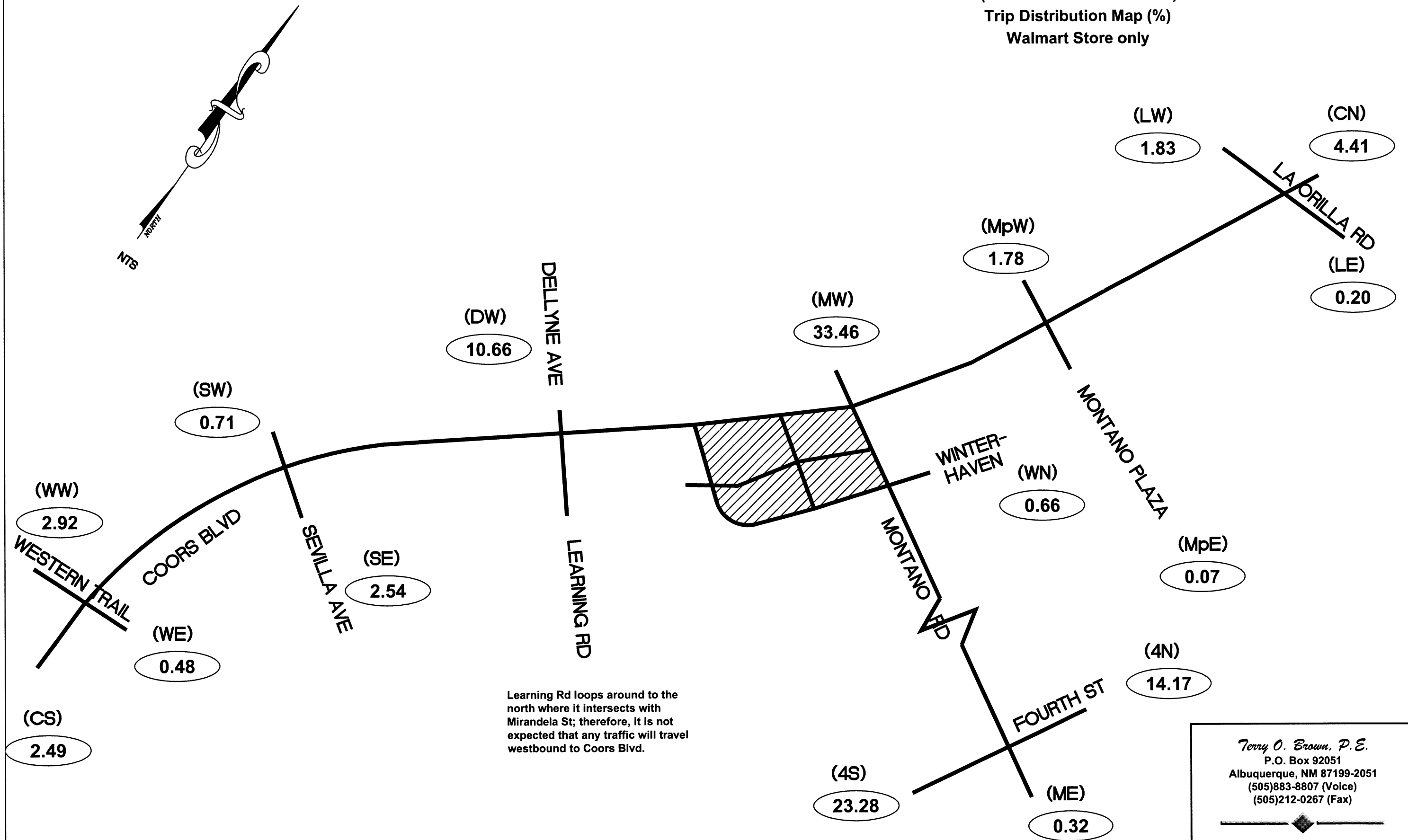
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

Trip Distribution Map (%)

Walmart Store only



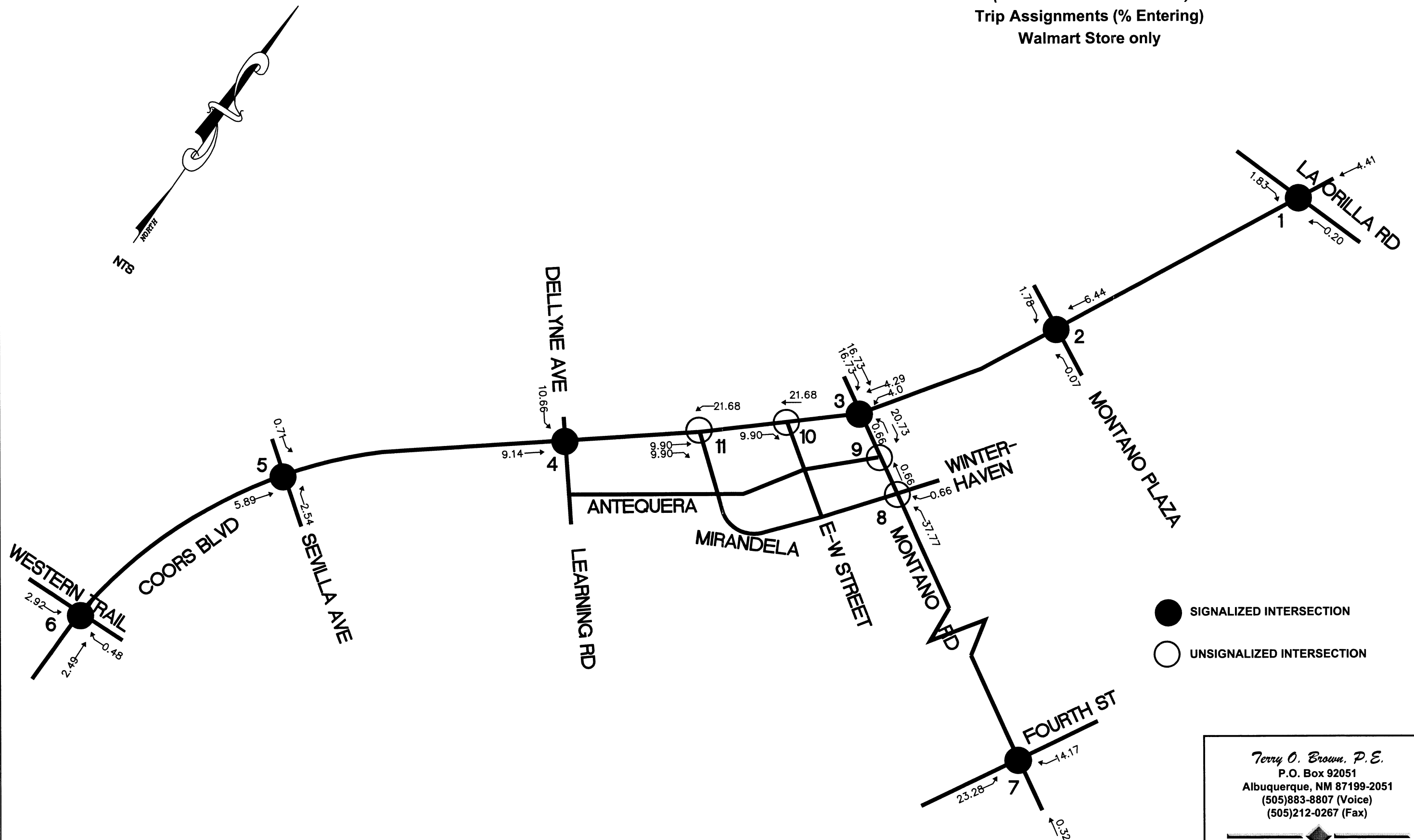
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

Trip Assignments (% Entering)

Walmart Store only



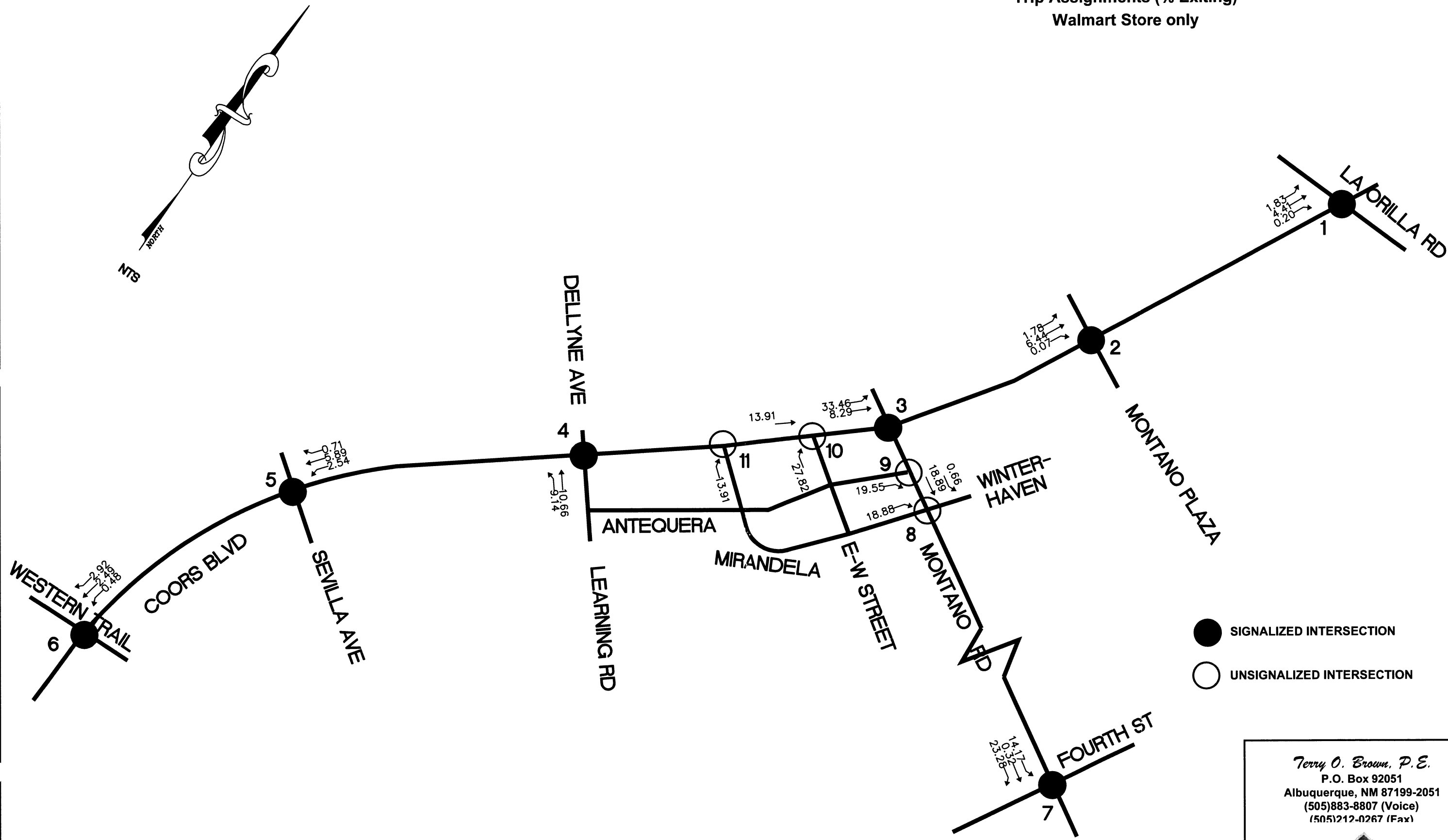
Terry O. Brown, P.E.
 P.O. Box 92051
 Albuquerque, NM 87199-2051
 (505)883-8807 (Voice)
 (505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

Trip Assignments (% Exiting)

Walmart Store only



● SIGNALIZED INTERSECTION
○ UNSIGNALIZED INTERSECTION

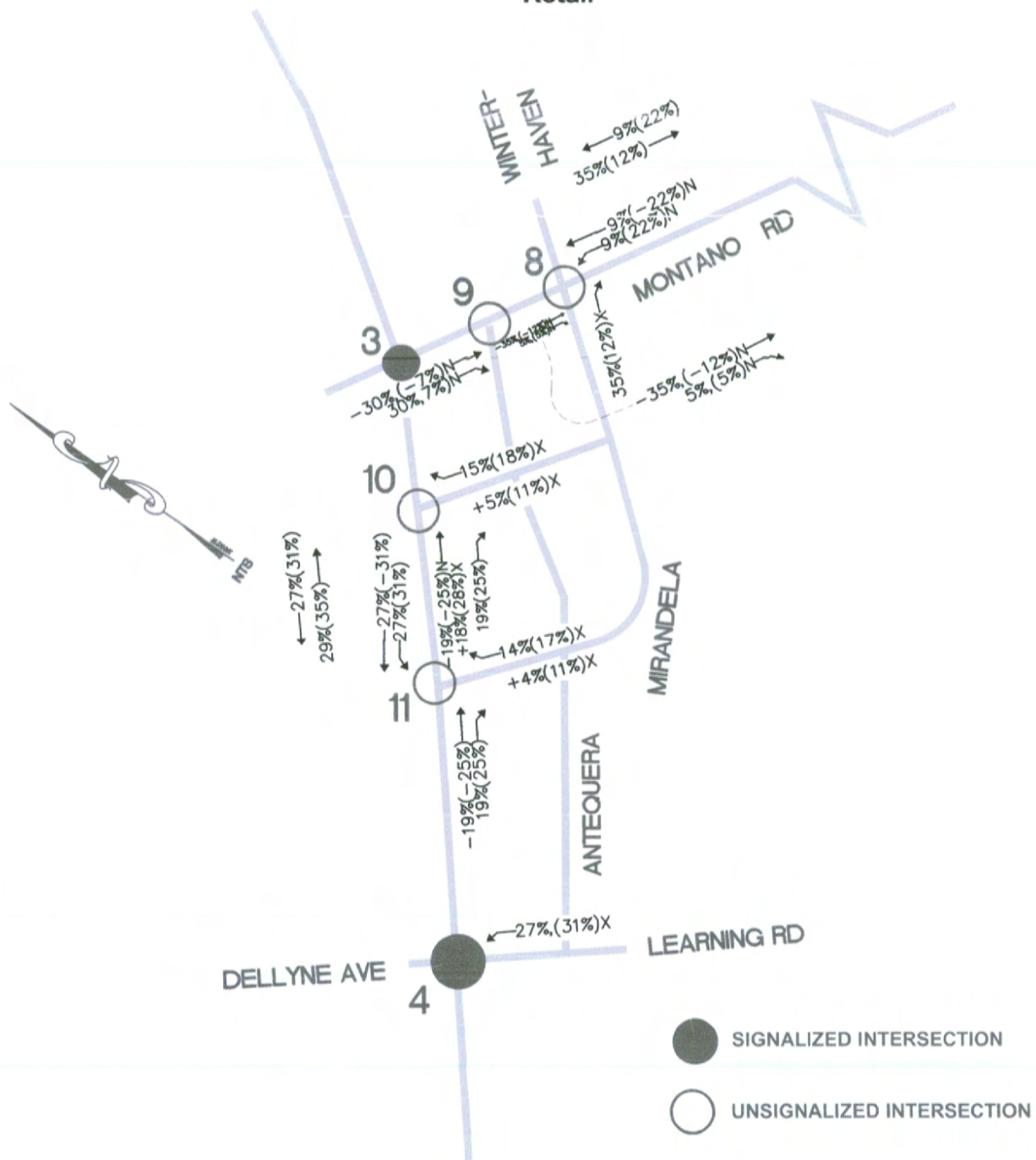
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

Pass-by Trips (%)

Retail



Montano Rd east of Fourth St is beyond the 2 mile limit of this distribution

Terry O. Brown, P.E.

P.O. Box 92051

Albuquerque, NM 87199-2051

(505)883-8807 (Voice)

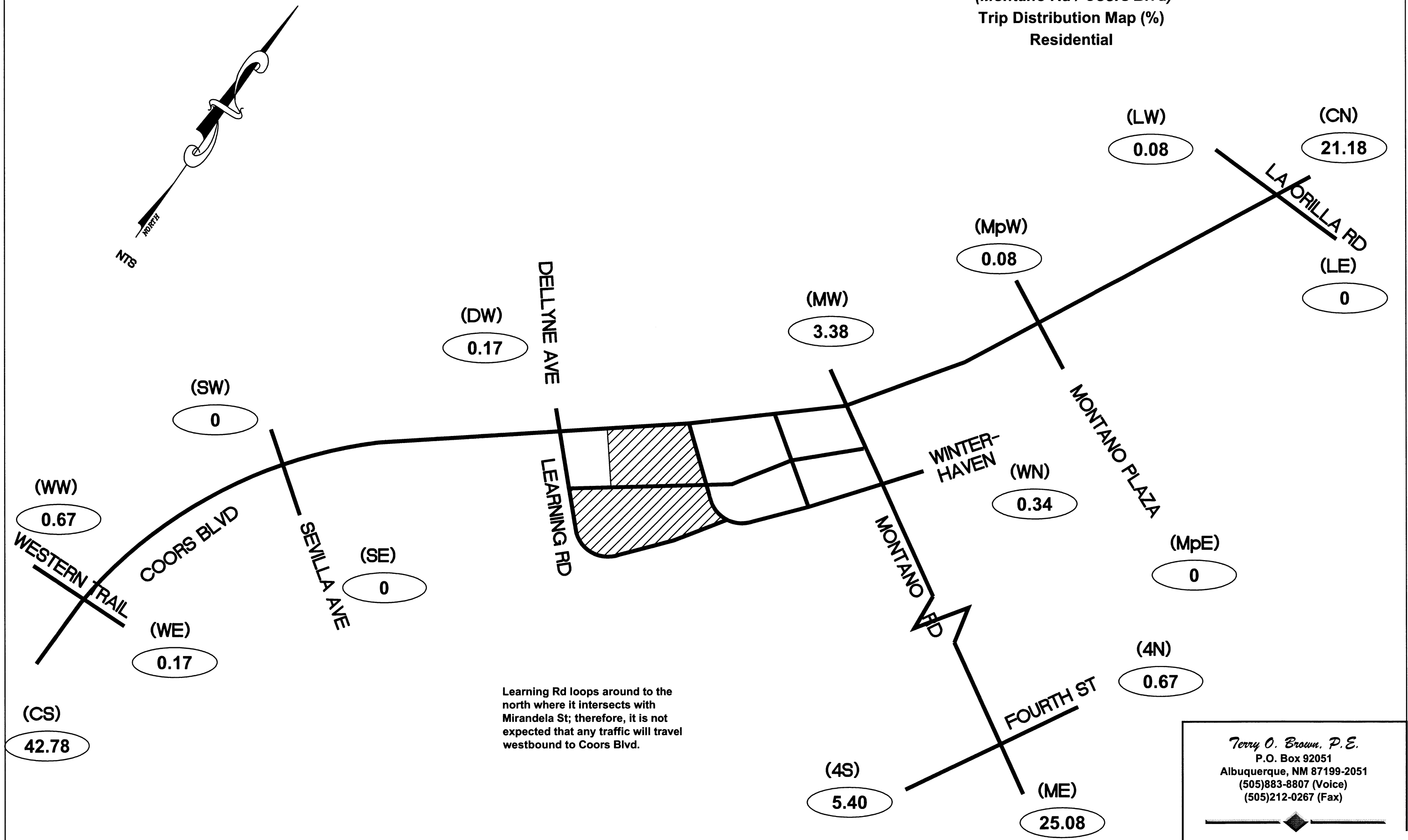
(505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

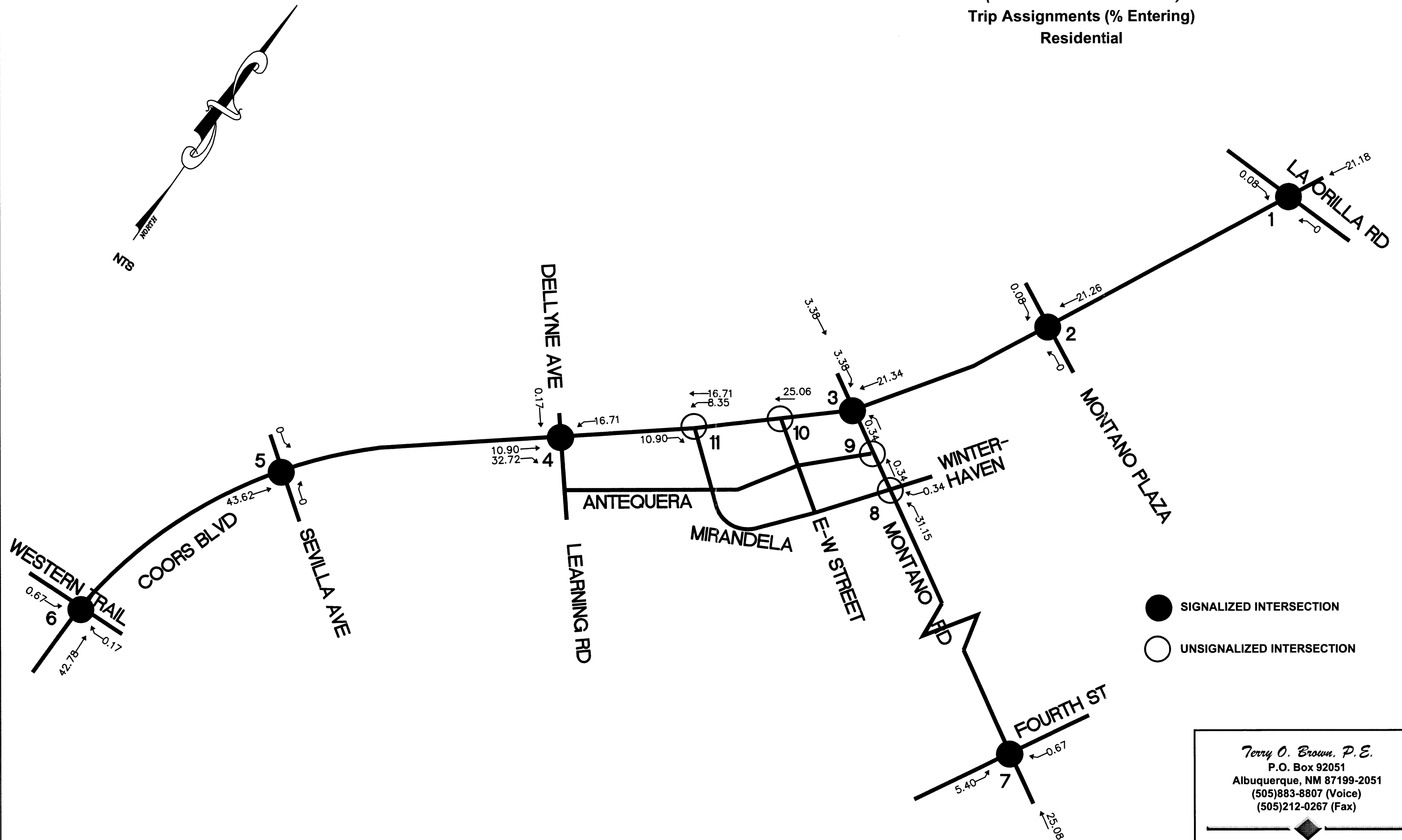
Trip Distribution Map (%)

Residential



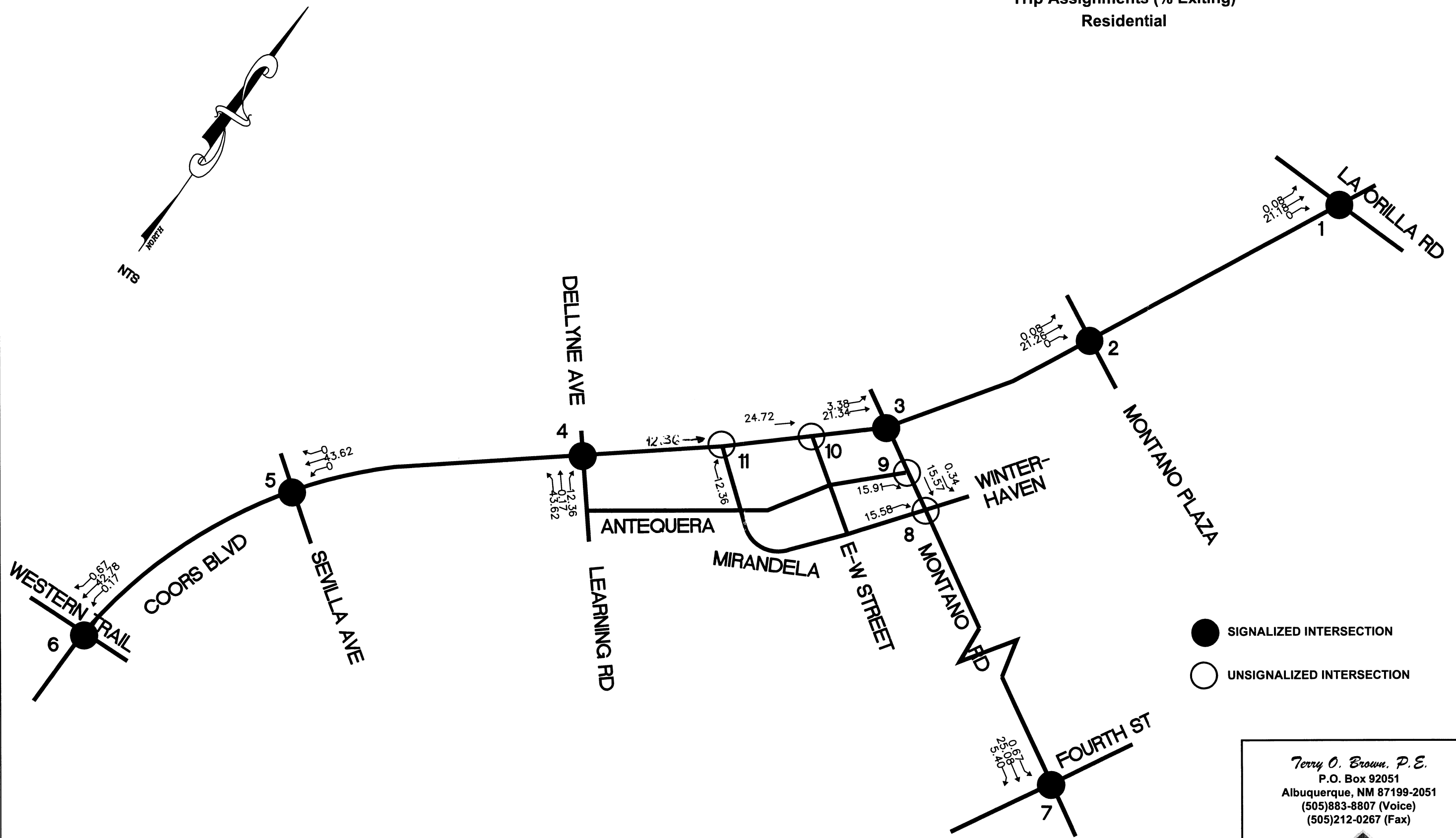
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P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Entering)
 Residential



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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Exiting)
 Residential



● SIGNALIZED INTERSECTION
 ○ UNSIGNALIZED INTERSECTION

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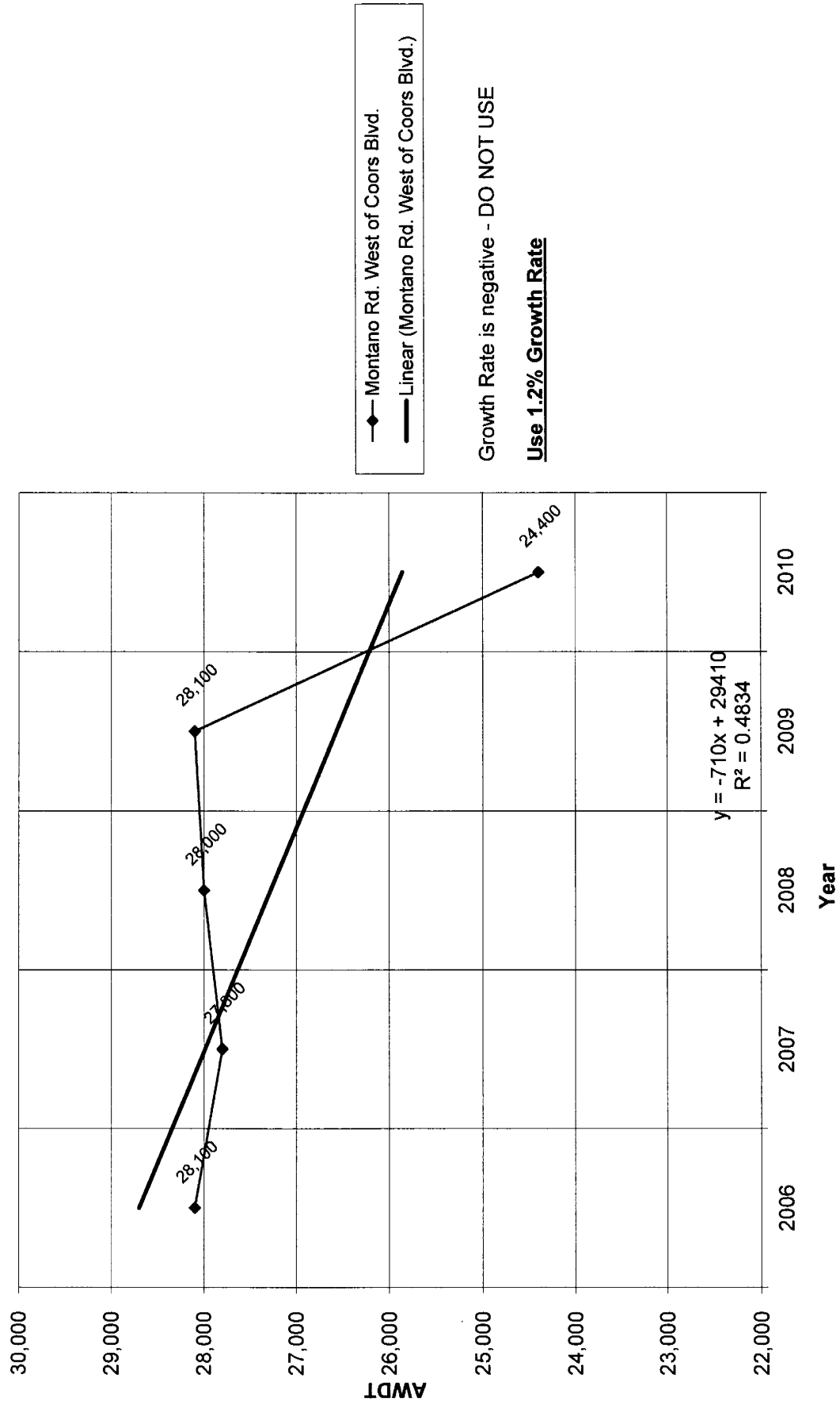
Andalucia, Tract 6 (Montano Rd. / Coors Blvd.)

Historic Growth Rate Table

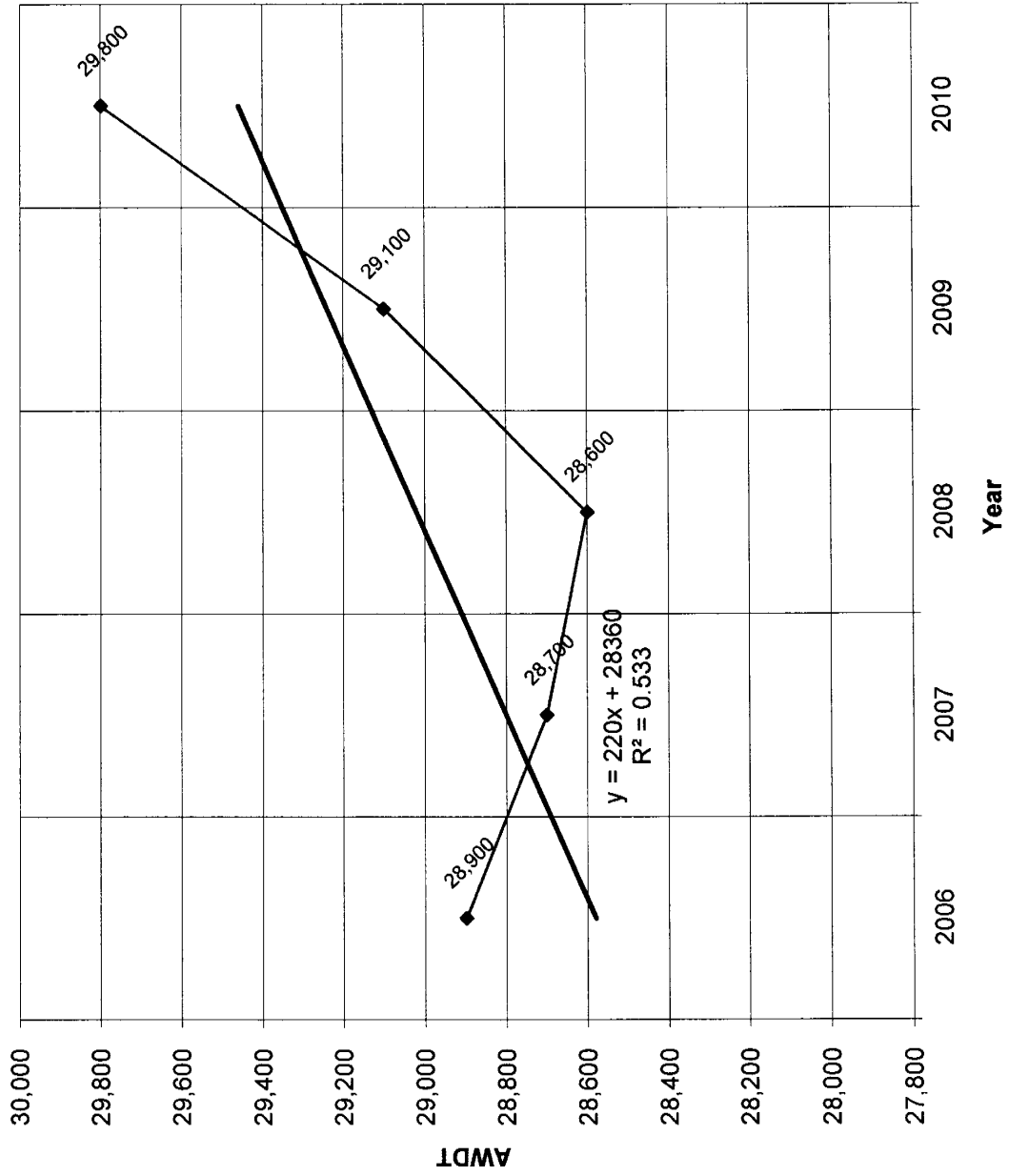
Traffic Flows from MRCOG Map

	2006	2007	2008	2009	2010
Montano Rd. West of Coors Blvd.	28,100	27,800	28,000	28,100	24,400
Montano Rd. East of Coors Blvd.	28,900	28,700	28,600	29,100	29,800
Coors Blvd. North of Montano Rd.	42,800	43,900	44,900	39,000	38,900
Coors Blvd. South of Montano Rd.	45,600	46,800	56,900	57,100	57,100
Dellyne Ave. West of Coors Blvd.	3,900	4,500	4,500	5,600	5,600
Learning Rd. East of Coors Blvd.	-	-	-	-	-
Coors Blvd. North of Dellyne Ave.	45,600	46,800	56,900	57,100	57,100
Coors Blvd. South of Dellyne Ave.	43,500	44,600	55,200	55,400	46,500

Historic Growth Chart Montano Rd. West of Coors Blvd. (2006-2010)



Historic Growth Chart Montano Rd. East of Coors Blvd.
(2006-2010)



—◆— Montano Rd. East of Coors Blvd.

— Linear (Montano Rd. East of Coors Blvd.)

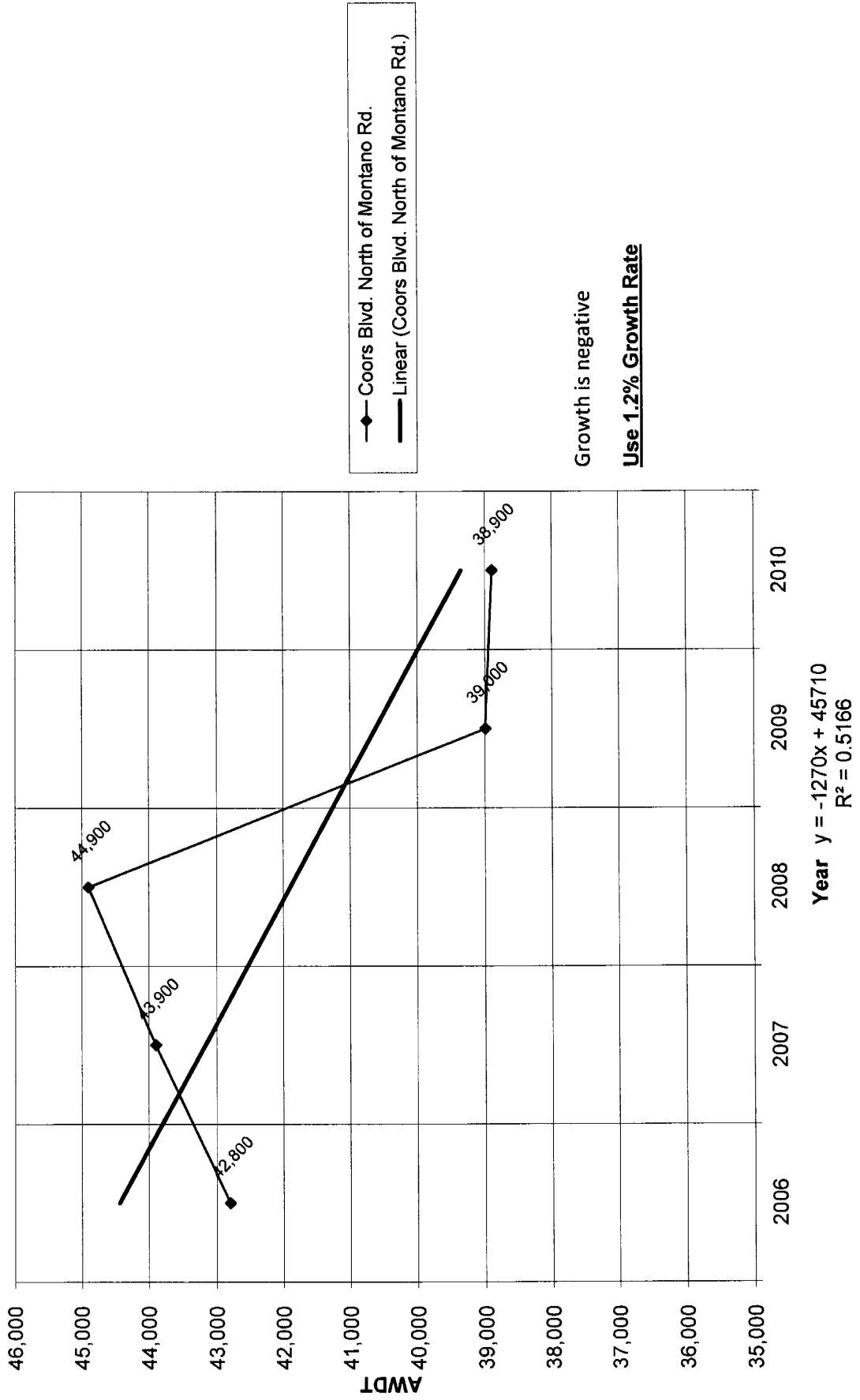
Annual Increase - 220

Growth = $220 / 29600$

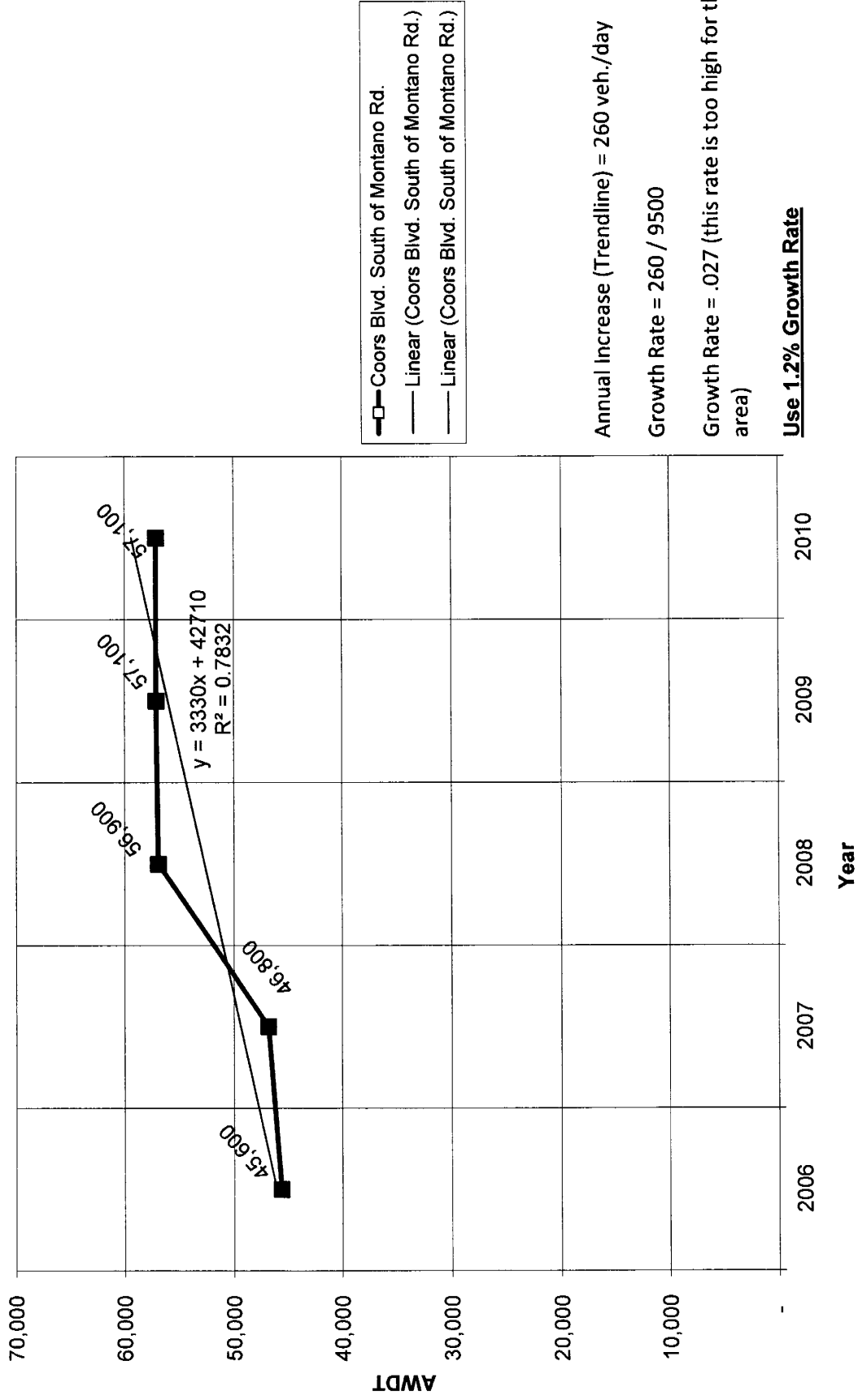
Growth = .0074

Use 1.2% Growth Rate

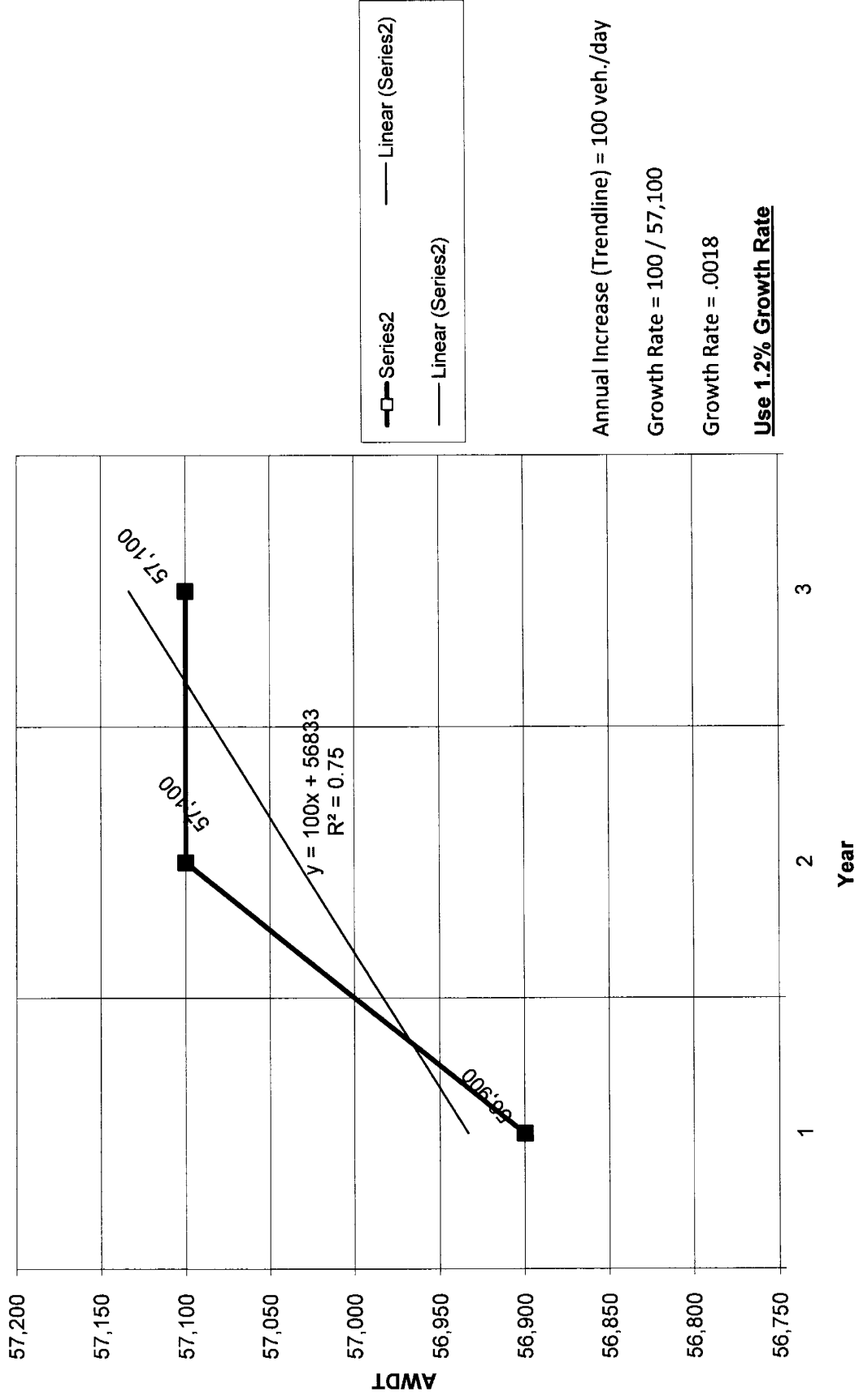
Historic Growth Chart Coors Blvd. North of Montano Rd. (2006-2010)



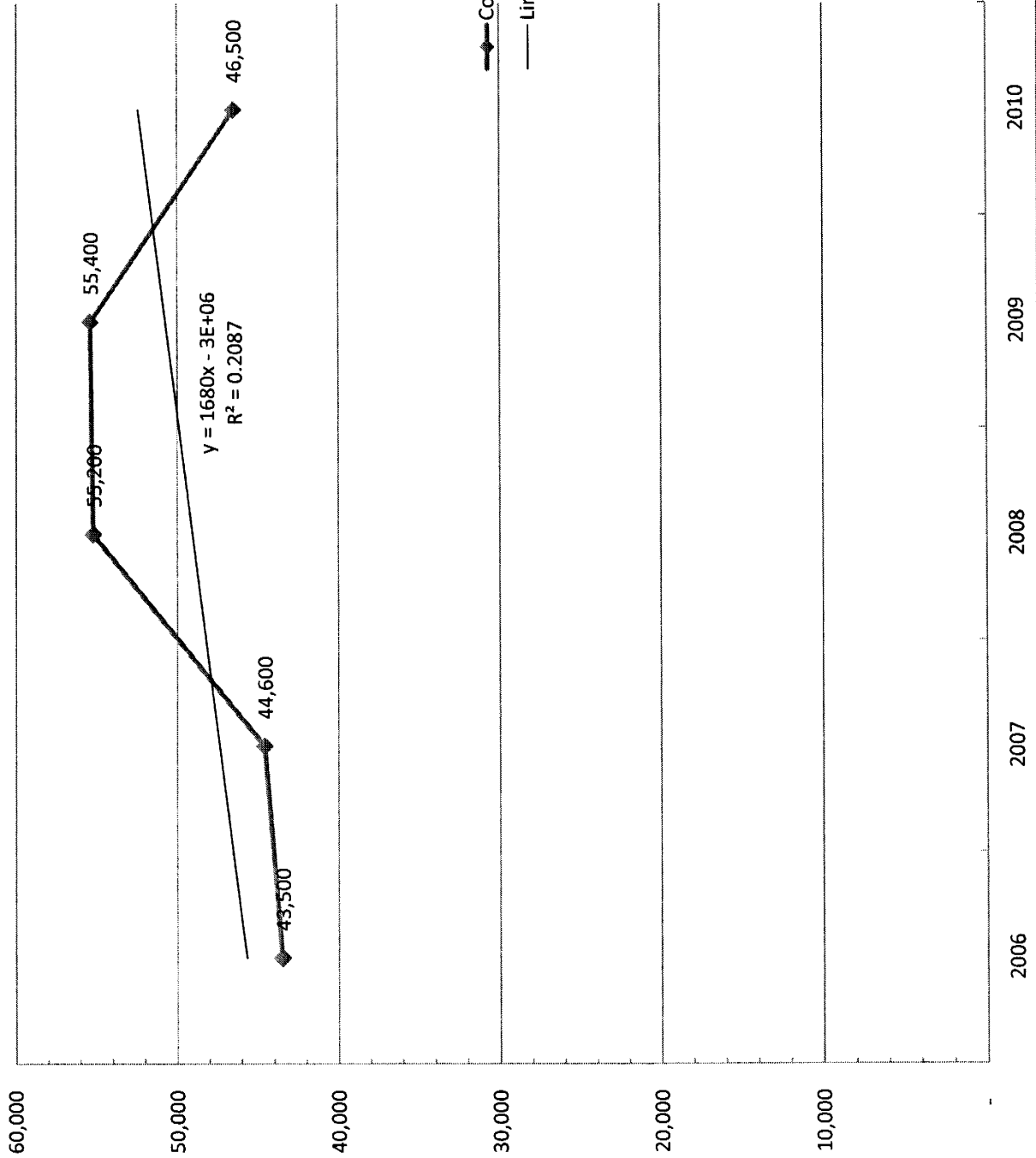
Historic Growth Chart Coors Blvd. South of Montano Rd. (2006-2010)



Historic Growth Chart Coors Blvd. South of Montano Rd. (2006-2010)



Coors Blvd. South of Dellyne Ave.



Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements SUMMARY PROPOSED DEVELOPMENT (2015) - 100% Development

INTERSECTION: Summary

Montano Rd / Coors Blvd

(3)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.88			0.76			0.88			0.90			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
237	1,120	304	233	219	150	255	1,137	629	629	1,328	11	
248	1,185	330	245	229	157	282	1,196	659	659	1,398	12	
248	1,226	372	264	229	157	348	1,243	659	671	1,417	12	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.91			0.93			0.96			0.92			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
265	274	361	383	1,064	156	574	1,658	238	318	1,481	66	
278	304	395	402	1,114	163	640	1,748	249	333	1,562	69	
278	401	497	438	1,114	163	824	1,815	249	359	1,619	69	

Dellyne Ave / Coors Blvd

(4)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.75			0.75			0.84			0.89			PHF
Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
231	30	282	51	8	8	59	1,615	69	40	2,077	29	
242	39	296	63	13	18	62	1,693	88	52	2,177	30	
270	39	296	136	34	78	62	1,723	116	75	2,177	30	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.89			0.75			0.96			0.97			PHF
Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
109	8	101	37	7	11	337	2,382	20	7	1,971	141	
114	20	106	66	21	38	353	2,496	44	21	2,066	148	
179	20	106	236	82	70	353	2,571	121	75	2,066	148	

Montano Rd / Fourth St

(7)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.90			0.79			0.83			0.91			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
148	1,239	473	121	361	66	194	405	179	195	492	977	
157	1,298	505	127	378	69	218	424	188	204	516	1,027	
172	1,333	551	127	387	69	274	424	188	204	516	1,048	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.95			0.91			0.89			0.91			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
136	592	228	153	1,218	193	397	539	158	168	496	137	
149	620	264	160	1,276	202	438	565	166	176	520	149	
201	639	388	160	1,311	202	572	565	166	176	520	205	

Montano Rd / Winterhaven Rd

(8)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.85			0.83			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
27	2,050	30	73	417	51	0	0	55	0	0	29	
28	2,154	31	95	437	53	0	0	64	0	0	31	
29	2,163	37	175	444	53	0	0	141	0	0	34	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.97			0.95			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
57	736	15	46	1,368	326	0	0	46	0	0	69	
61	786	16	75	1,434	342	0	0	63	0	0	73	
66	853	29	324	1,409	342	0	0	189	0	0	78	

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements SUMMARY **PROPOSED DEVELOPMENT (2015) - 100% Development**

INTERSECTION: **Summary**

Montano Rd / Antequera Rd

(9)	2.0% Truck	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
		0	2,379	0	0	601	0	0	0	0	0	0	0	0
		0	2,492	0	0	630	0	0	0	0	0	0	0	0
		0	2,459	86	0	649	0	0	0	50	0	0	0	0
0.95			0.95			0.85			0.85			PHF		
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)					
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
0	830	0	0	1,602	0	0	0	0	0	0	0		0	
0	869	0	0	1,678	0	0	0	0	0	0	0		0	
Existing (2011)	2015 (NO BUILD - P.M.)	0	851	141	0	1,714	0	0	0	103	0	0	0	
		0.95			0.95			0.85			0.85			
		Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
		0	830	0	0	1,602	0	0	0	0	0	0	0	
2015 (NO BUILD - P.M.)	2015 (BUILD - P.M.)	0	869	0	0	1,678	0	0	0	0	0	0	0	
		0	851	141	0	1,714	0	0	0	103	0	0	0	
		0.95			0.95			0.85			0.85			
		Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	

E-W Street / Coors Blvd

(10)	2.0% Truck	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
		0	0	0	0	0	0	0	2,022	0	0	1,864	0	
		0	0	0	0	0	0	0	2,137	0	0	1,973	0	
		0	0	0	0	0	69	0	2,191	48	0	2,055	0	
		0.85			0.85			0.96			0.96			PHF
		Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2011)	0	0	0	0	0	0	0	2,469	0	0	2,224	0		
	0	0	0	0	0	0	0	2,638	0	0	2,359	0		
	0	0	0	0	0	225	0	2,738	125	0	2,552	0		
	0	0	0	0	0	0	0	0	0	0	0	0		

Mirandela Rd / Coors Blvd

(11) 2.0% Truck Existing (2011) 2015 (NO BUILD - A.M.) 2015 (BUILD - A.M.)	0.85			0.85			0.96			0.96			PHF
	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	2,022	0	0	1,864	0	
	0	0	0	0	0	10	0	2,128	0	10	1,963	0	
	0	0	0	0	0	68	0	2,151	52	99	1,956	0	
Existing (2011) 2015 (NO BUILD - P.M.) 2015 (BUILD - P.M.)	0.85			0.85			0.96			0.96			PHF
	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	2,469	0	0	2,224	0	
	0	0	0	0	0	26	0	2,612	0	14	2,344	0	
	0	0	0	0	0	180	0	2,620	141	231	2,320	0	

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Coors Blvd**INTERSECTION:** E-W Street: **Montano Rd** (3)N-S Street: **Coors Blvd**Year of Existing Counts **2010**Implementation Year **2015**

Growth Rates

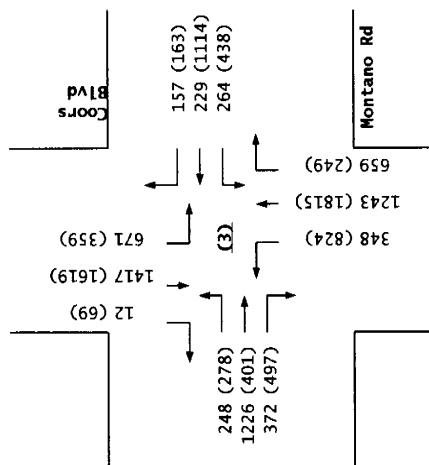
	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	234	1,107	300	230	216	148	252	1,124	622	622	1,312	11
Background Traffic Growth	14	66	18	14	13	9	15	67	37	37	79	1
Subtotal	248	1,173	318	244	229	157	267	1,191	659	659	1,391	12
Credit Union (Learning) Trips	0	12	12	1	0	0	15	5	0	0	7	0
Subtotal (NO BUILD - A.M.)	248	1,185	330	245	229	157	282	1,196	659	659	1,398	12
Percent Residential Trips Generated(Entering)	0.00%	0.00%	3.38%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.34%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.38%	21.34%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	15.89%	15.90%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	4.95%	5.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.79%	9.95%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	16.73%	16.73%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	4.29%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.46%	8.29%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	41	42	19	0	0	66	47	0	12	19	0
Total AM Peak Hour BUILD Volumes	248	1,226	372	264	229	157	348	1,243	659	671	1,417	12

AM Adjustment for Heavy EB Flow on Montano

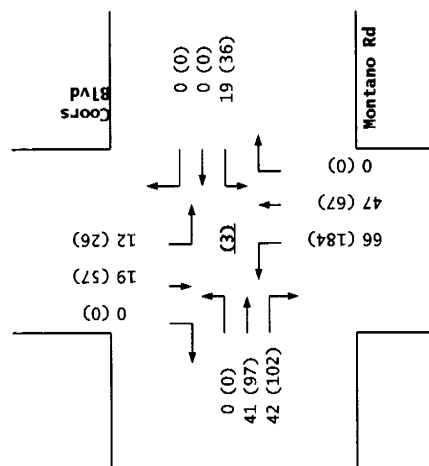
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65
Background Traffic Growth	16	16	21	23	63	9	34	98	14	19	88	4
Subtotal	278	287	378	401	1,114	163	601	1,736	249	333	1,551	69
Credit Union (Learning) Trips	0	17	17	1	0	0	39	12	0	0	11	0
Subtotal (NO BUILD - P.M.)	278	304	395	402	1,114	163	640	1,748	249	333	1,562	69
Percent Residential Trips Generated(Entering)	0.00%	0.00%	3.38%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.34%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.38%	21.34%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	15.89%	15.90%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	4.95%	5.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.79%	9.95%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	16.73%	16.73%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	4.29%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.46%	8.29%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	97	102	36	0	0	184	67	0	26	57	0
Total PM Peak Hour BUILD Volumes	278	401	497	438	1,114	163	824	1,815	249	359	1,619	69

	Entering	Exiting		
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	165	136	A.M.	100% Commercial Development
	312	286	P.M.	
Number of Walmart Store Trips Generated	92	53	A.M.	100% Walmart Store Development
	279	272	P.M.	

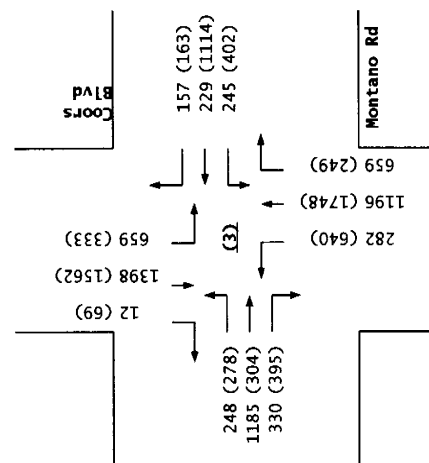
2015
BUILD



Trips



2015
NO BUILD



Montano Rd / Coors Blvd

Andalucia Update (Montano Rd / Coors Blvd)
Projected Turning Movements Worksheet
Dellyne Ave / Coors Blvd

INTERSECTION : E-W Street: **Dellyne Ave** (4)

N-S Street: **Coors Blvd**

Year of Existing Counts 2011

Implementation Year 2015

Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	231	30	282	51	8	8	59	1,615	69	40	2,077	29
Background Traffic Growth	11	1	14	2	0	0	3	78	3	2	100	1
Subtotal	242	31	296	53	8	8	62	1,693	72	42	2,177	30
Credit Union (Learning) Trips	0	8	0	10	5	10	0	0	16	10	0	0
Subtotal (NO BUILD - A.M.)	242	39	296	63	13	18	62	1,693	88	52	2,177	30
Percent Residential Trips Generated(Entering)	0.00%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	32.72%	16.71%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	12.36%	0.17%	43.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	10.53%	10.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	21.53%	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	10.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.14%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	9.14%	10.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	28	0	0	51	21	60	0	30	28	23	0	0
Total AM Peak Hour BUILD Volumes	270	39	296	136	34	78	62	1,723	116	75	2,177	30

	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	109	8	101	37	7	11	337	2,382	20	7	1,971	141
Background Traffic Growth	5	0	5	2	0	1	16	114	1	0	95	7
Subtotal	114	8	106	39	7	12	353	2,496	21	7	2,066	148
Credit Union (Learning) Trips	0	12	0	27	14	26	0	0	23	14	0	0
Subtotal (NO BUILD - P.M.)	114	20	106	66	21	38	353	2,496	44	21	2,066	148
Percent Residential Trips Generated(Entering)	0.00%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	32.72%	16.71%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	12.36%	0.17%	43.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	10.53%	10.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	21.53%	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	10.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.14%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	9.14%	10.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	65	0	0	96	61	32	0	75	77	54	0	0
Total PM Peak Hour BUILD Volumes	179	20	106	236	82	70	353	2,571	121	75	2,066	148

	Entering	Exiting	
Number of Residential Trips Generated	35	138	A.M. 100% Residential Development
	135	73	P.M.
Number of Commercial Trips Generated	165	136	A.M. 100% Commercial Development
	312	286	P.M.
Number of Walmart Store Trips Generated	92	53	A.M. 100% Walmart Store Development
	279	272	P.M.

	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2011 AM Peak Hr. Volumes	231	30	282	51	8	8	59	1,615	69	40	2,077	29
2011 PM Peak Hr. Volumes	109	8	101	37	7	11	337	2,382	20	7	1,971	141

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering
 Volume Entering
 Percent Exiting
 Volume Exiting
Net AM Passby Trips

	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	27.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	22	0	0	0	0	0	0	0	0
Net AM Passby Trips	0	0	0	22	0	0	0	0	0	0	0	0

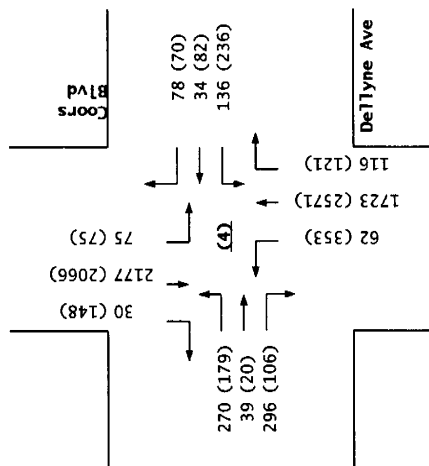
PM Pass-by Trips

Percent Entering
 Volume Entering
 Percent Exiting
 Volume Exiting
Net PM Passby Trips

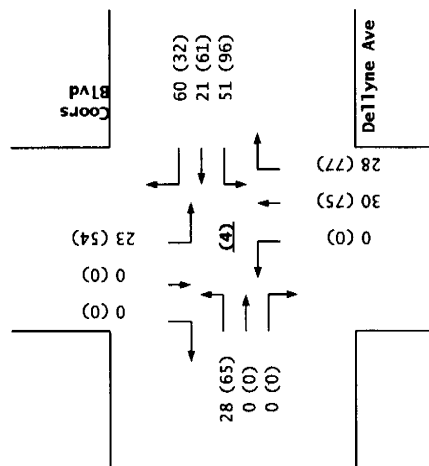
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	31.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	74	0	0	0	0	0	0	0	0
Net PM Passby Trips	0	0	0	74	0	0	0	0	0	0	0	0

Pass-by Trips
 Entering 110 81 AM
 Exiting 253 239 PM

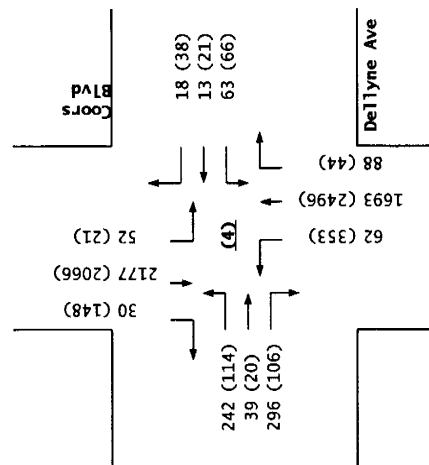
2015
BUILD



Trips



2015
NO BUILD



Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Fourth St

INTERSECTION :

E-W Street: **Montano Rd** (7)

N-S Street: **Fourth St**

Year of Existing Counts **2011**

Implementation Year **2015**

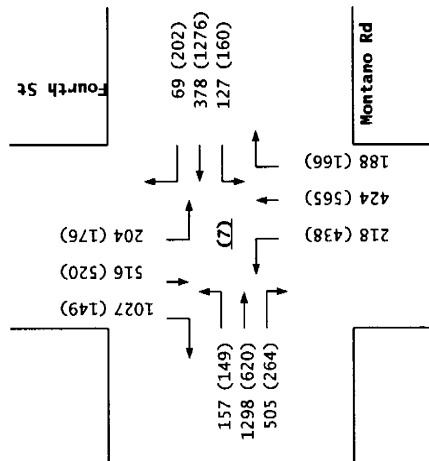
Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	148	1,239	473	121	361	66	194	405	179	195	492	977
Background Traffic Growth	7	59	23	6	17	3	9	19	9	9	24	47
Subtotal	155	1,298	496	127	378	69	203	424	188	204	516	1,024
Credit Union (Leaming) Trips	2	0	9	0	0	0	15	0	0	0	0	3
Subtotal (NO BUILD - A.M.)	157	1,298	505	127	378	69	218	424	188	204	516	1,027
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	25.08%	0.00%	5.40%	0.00%	0.00%	0.00%	0.00%	0.67%
Percent Residential Trips Generated(Exiting)	0.67%	25.08%	5.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	4.67%
Percent Commercial Trips Generated(Exiting)	4.67%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.32%	0.00%	23.28%	0.00%	0.00%	0.00%	0.00%	14.17%
Percent Walmart Store Trips Generated(Exiting)	14.17%	0.32%	23.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	15	35	46	0	9	0	56	0	0	0	0	21
Total AM Peak Hour BUILD Volumes	172	1,333	551	127	387	69	274	424	188	204	516	1,048

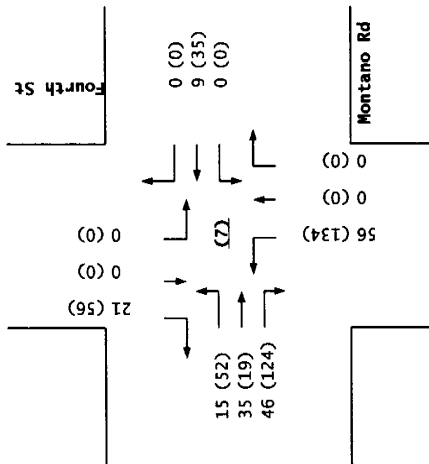
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	136	592	228	153	1,218	193	397	539	158	168	496	137
Background Traffic Growth	7	28	11	7	58	9	19	26	8	8	24	7
Subtotal	143	620	239	160	1,276	202	416	565	166	176	520	144
Credit Union (Leaming) Trips	6	0	25	0	0	0	22	0	0	0	0	5
Subtotal (NO BUILD - P.M.)	149	620	264	160	1,276	202	438	565	166	176	520	149
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	25.08%	0.00%	5.40%	0.00%	0.00%	0.00%	0.00%	0.67%
Percent Residential Trips Generated(Exiting)	0.67%	25.08%	5.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	4.67%
Percent Commercial Trips Generated(Exiting)	4.67%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.32%	0.00%	23.28%	0.00%	0.00%	0.00%	0.00%	14.17%
Percent Walmart Store Trips Generated(Exiting)	14.17%	0.32%	23.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	52	19	124	0	35	0	134	0	0	0	0	56
Total PM Peak Hour BUILD Volumes	201	639	388	160	1,311	202	572	565	166	176	520	205

	Entering	Exiting		
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	165	136	A.M.	100% Commercial Development
	312	286	P.M.	
Number of Walmart Store Trips Generated	92	53	A.M.	100% Walmart Store Development
	279	272	P.M.	

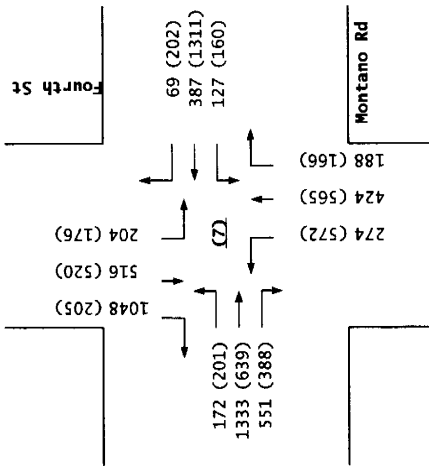
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Fourth St

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Winterhaven Rd

INTERSECTION : E-W Street: **Montano Rd** (8)
N-S Street: **Winterhaven Rd**

Year of Existing Counts 2011
Implementation Year 2015

Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	27	2,050	30	73	417	51	0	0	55	0	0	29
Background Traffic Growth	1	98	1	4	20	2	0	0	3	0	0	1
Subtotal	28	2,148	31	77	437	53	0	0	58	0	0	30
Credit Union (Learning) Trips	0	6	0	18	0	0	0	0	6	0	0	1
Subtotal (NO BUILD - A.M.)	28	2,154	31	95	437	53	0	0	64	0	0	31
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	31.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%
Percent Residential Trips Generated(Exiting)	0.34%	15.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.58%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	14.66%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.93%
Percent Commercial Trips Generated(Exiting)	0.93%	12.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.33%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	37.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.66%
Percent Walmart Store Trips Generated(Exiting)	0.66%	18.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.88%	0.00%	0.00%	0.00%
Total Trips Generated	1	48	0	70	17	0	0	0	49	0	0	3
Subtotal AM Pk Hr. BUILD Volumes	29	2,202	31	165	454	53	0	0	113	0	0	34
Pass-by Trip Adjustments	0	-39	6	10	-10	0	0	0	28	0	0	0
Total AM Peak Hour BUILD Volumes	29	2,163	37	175	444	53	0	0	141	0	0	34

AM Adjustment for Heavy EB Flow on Montano

	-75			75								
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	57	736	15	46	1,368	326	0	0	46	0	0	69
Background Traffic Growth	3	35	1	2	66	16	0	0	2	0	0	3
Subtotal	60	771	16	48	1,434	342	0	0	48	0	0	72
Credit Union (Learning) Trips	1	15	0	27	0	0	0	0	15	0	0	1
Subtotal (NO BUILD - P.M.)	61	786	16	75	1,434	342	0	0	63	0	0	73
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	31.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%
Percent Residential Trips Generated(Exiting)	0.34%	15.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.58%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	14.66%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.93%
Percent Commercial Trips Generated(Exiting)	0.93%	12.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.33%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	37.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.66%
Percent Walmart Store Trips Generated(Exiting)	0.66%	18.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.88%	0.00%	0.00%	0.00%
Total Trips Generated	5	97	0	193	31	0	0	0	97	0	0	5
Subtotal PM Pk Hr. BUILD Volumes	66	883	16	268	1,465	342	0	0	160	0	0	78
Pass-by Trip Adjustments	0	-30	13	56	-56	0	0	0	29	0	0	0
Total PM Peak Hour BUILD Volumes	66	853	29	324	1,409	342	0	0	189	0	0	78

	Entering	Exiting		
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	165	136	A.M.	100% Commercial Development
	312	286	P.M.	
Number of Walmart Store Trips Generated	92	53	A.M.	100% Walmart Store Development
	279	272	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips

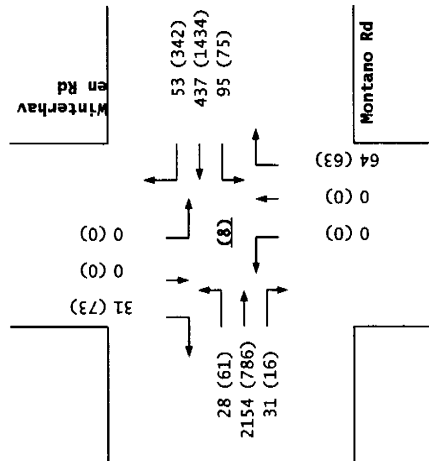
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
Percent Entering	0.00%	-35.00%	5.00%	9.00%	-9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-39	6	10	-10	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	28	0	0	0
Net AM Passby Trips	0	-39	6	10	-10	0	0	0	28	0	0	0

PM Pass-by Trips

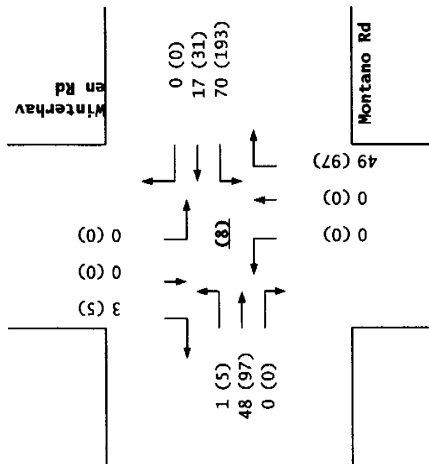
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
Percent Entering	0.00%	-12.00%	5.00%	22.00%	-22.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-30	13	56	-56	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	29	0	0	0
Net PM Passby Trips	0	-30	13	56	-56	0	0	0	29	0	0	0

Pass-by Trips	Entering	Exiting	
	110	81	AM
	253	239	PM

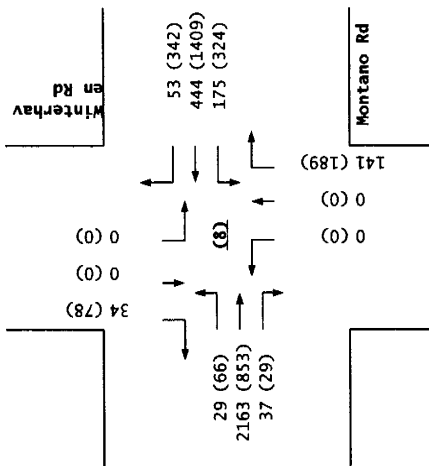
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Winterhaven Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Antequera Rd

INTERSECTION : E-W Street: **Montano Rd** (9)
 N-S Street: **Antequera Rd**
 Year of Existing Counts: 2010
 Implementation Year: 2015

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	2,351	0	0	594	0	0	0	0	0	0	0
Background Traffic Growth	0	141	0	0	36	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	0	2,492	0	0	630	0	0	0	0	0	0	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.91%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	20.84%	0.00%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.26%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	20.73%	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.55%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	53	0	19	0	0	0	50	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	0	2,492	53	0	649	0	0	0	50	0	0	0
Pass-by Trip Adjustments	0	-33	33	0	0	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	0	2,459	86	0	649	0	0	0	50	0	0	0

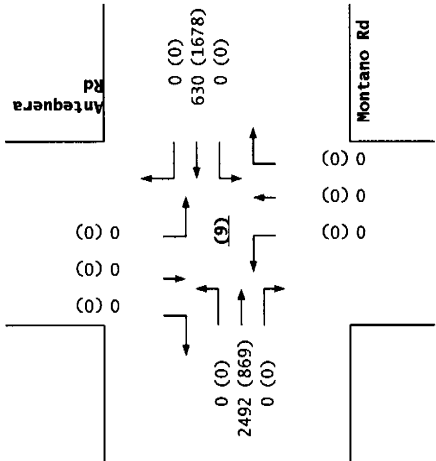
AM Adjustment for Heavy EB Flow on Montano

	75											
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	820	0	0	1,583	0	0	0	0	0	0	0
Background Traffic Growth	0	49	0	0	95	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	0	869	0	0	1,678	0	0	0	0	0	0	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.91%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	20.84%	0.00%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.26%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	20.73%	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.55%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	123	0	36	0	0	0	103	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	0	869	123	0	1,714	0	0	0	103	0	0	0
Pass-by Trip Adjustments	0	-18	18	0	0	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	0	851	141	0	1,714	0	0	0	103	0	0	0

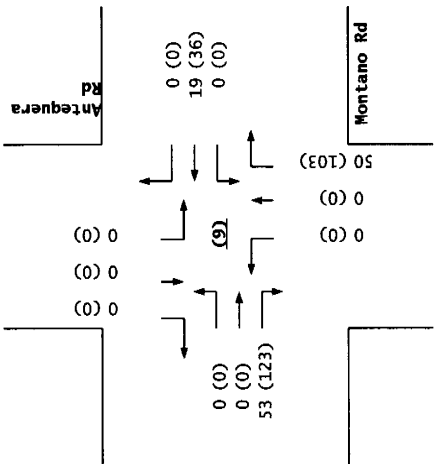
	Entering	Exiting	
Number of Residential Trips Generated	35	138	A.M.
	135	73	P.M.
Number of Commercial Trips Generated	165	136	A.M. 100% Commercial Development
	312	286	P.M.
Number of Walmart Store Trips Generated	92	53	A.M. 100% Walmart Store Development
	279	272	P.M.

Pass-by Trip Calculations:												
AM Pass-by Trips												
Percent Entering	0.00%	-30.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-33	33	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	0	0	0	0
Net AM Passby Trips	0	-33	33	0	0	0	0	0	0	0	0	0
PM Pass-by Trips												
Percent Entering	0.00%	-7.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-18	18	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	0	0	0	0
Net PM Passby Trips	0	-18	18	0	0	0	0	0	0	0	0	0
Pass-by Trips												
	Entering	Exiting										
	110	81	AM									
	253	239	PM									

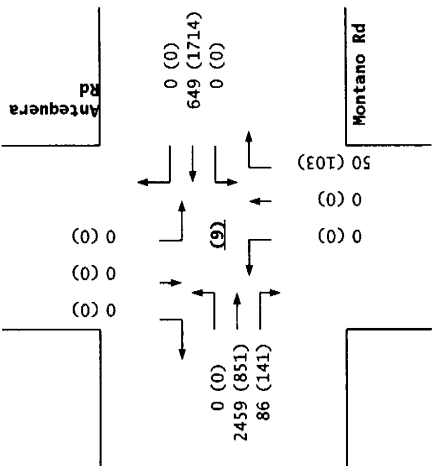
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Antequera Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

E-W Street / Coors Blvd

INTERSECTION:

E-W Street: **E-W Street**

(10)

N-S Street: **Coors Blvd**

Year of Existing Counts

2010

Implementation Year

2015

Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	1,998	0	0	1,842	0
Background Traffic Growth	0	0	0	0	0	0	0	120	0	0	111	0
Subtotal	0	0	0	0	0	0	0	2,118	0	0	1,953	0
Credit Union (Learning) Trips	0	0	0	0	0	0	0	19	0	0	20	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	2,137	0	0	1,973	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.06%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.72%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	31.83%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	0.00%	21.68%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	53	0	60	27	0	82	0
Subtotal AM Pk Hr. BUILD Volumes	0	0	0	0	0	53	0	2,197	27	0	2,055	0
Pass-by Trip Adjustments	0	0	0	0	0	16	0	-6	21	0	0	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	69	0	2,191	48	0	2,055	0

AM Adjustment for Heavy EB Flow on Montano

75

	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	2,440	0	0	2,198	0
Background Traffic Growth	0	0	0	0	0	0	0	146	0	0	132	0
Subtotal	0	0	0	0	0	0	0	2,586	0	0	2,330	0
Credit Union (Learning) Trips	0	0	0	0	0	0	0	52	0	0	29	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	2,638	0	0	2,359	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.06%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.72%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	31.83%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	0.00%	21.68%	0.00%
Percent Walmart Store Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	156	0	96	62	0	193	0
Subtotal PM Pk Hr. BUILD Volumes	0	0	0	0	0	156	0	2,734	62	0	2,552	0
Pass-by Trip Adjustments	0	0	0	0	0	69	0	4	63	0	0	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	225	0	2,738	125	0	2,552	0

Number of Residential Trips Generated	Entering 35	Exiting 138	A.M.	
	135	73	P.M.	
Number of Commercial Trips Generated	165	136	A.M.	100% Commercial Development
	312	286	P.M.	
Number of Walmart Store Trips Generated	92	53	A.M.	100% Walmart Store Development
	279	272	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering
Volume Entering
Percent Exiting
Volume Exiting

Net AM Passby Trips

	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	0.00%	0.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	-21	21	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	16	0	15	0	0	0	0
Net AM Passby Trips	0	0	0	0	0	16	0	-6	21	0	0	0

PM Pass-by Trips

Percent Entering
Volume Entering
Percent Exiting
Volume Exiting

Net PM Passby Trips

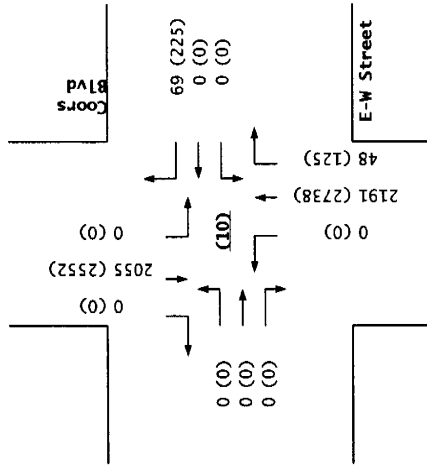
	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	0.00%	0.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	-63	63	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	29.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	69	0	67	0	0	0	0
Net PM Passby Trips	0	0	0	0	0	69	0	4	63	0	0	0

Pass-by Trips

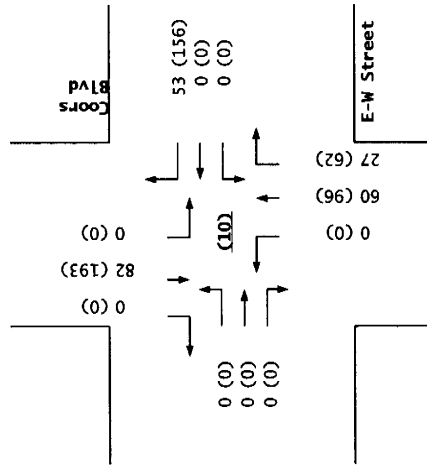
Entering
110
253

Exiting
81 AM
239 PM

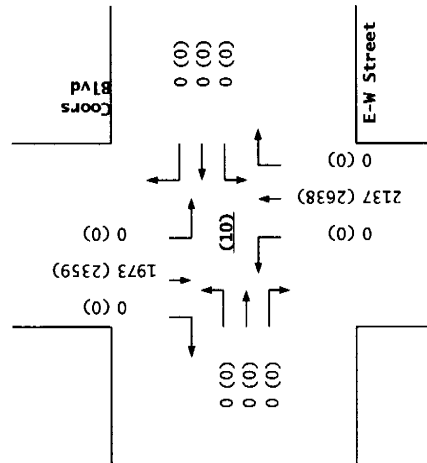
2015
BUILD



Trips



2015
NO BUILD



E-W Street / Coors Blvd

Andalucia Update (Montano Rd / Coors Blvd)
Projected Turning Movements Worksheet
Mirandela Rd / Coors Blvd

INTERSECTION :E-W Street: **Mirandela Rd**

(11)

N-S Street: **Coors Blvd**

Year of Existing Counts

2010

Implementation Year

2015

Growth Rates

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Walmart Store Trips Generated(Entering)

Percent Walmart Store Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

AM Adjustment for Heavy EB Flow on Montano

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Walmart Store Trips Generated(Entering)

Percent Walmart Store Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Number of Residential Trips Generated

Entering	35	138	A.M.
Exiting	135	73	P.M.

Number of Commercial Trips Generated

Entering	165	136	A.M.
Exiting	312	286	P.M.

100% Commercial Development

Number of Walmart Store Trips Generated

Entering	92	53	A.M.
Exiting	279	272	P.M.

100% Walmart Store Development

2011 AM Peak Hr. Volumes

2011 PM Peak Hr. Volumes

Pass-by Trip Calculations:**AM Pass-by Trips**

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net PM Passby Trips

Pass-by Trips

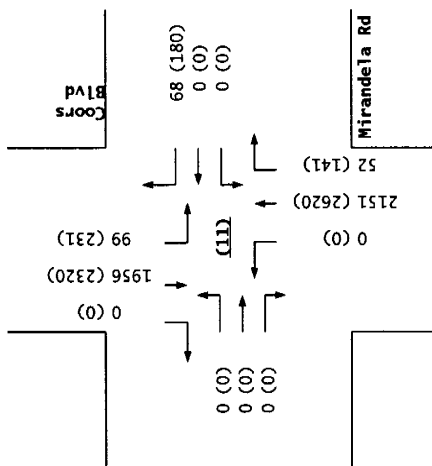
Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	2,022	0	0	1,864	0
0	0	0	0	0	0	0	2,469	0	0	2,224	0

Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	27.00%	-27.00%	0.00%
0	0	0	0	0	0	0	-21	21	30	-30	0
0.00%	0.00%	0.00%	0.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	15	0	0	0	0	0	0
0	0	0	0	0	15	0	-21	21	30	-30	0

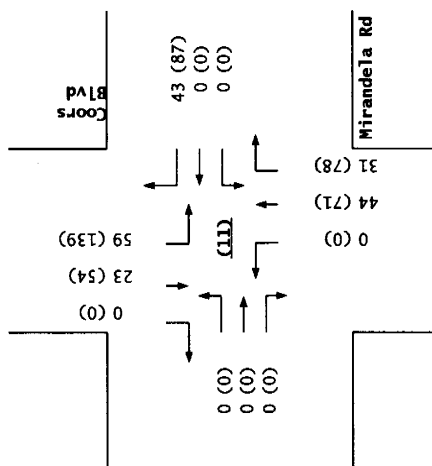
Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	31.00%	-31.00%	0.00%
0	0	0	0	0	0	0	-63	63	78	-78	0
0.00%	0.00%	0.00%	0.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	67	0	0	0	0	0	0
0	0	0	0	0	67	0	-63	63	78	-78	0

Entering	110	81	AM
Exiting	253	239	PM

2015
BUILD

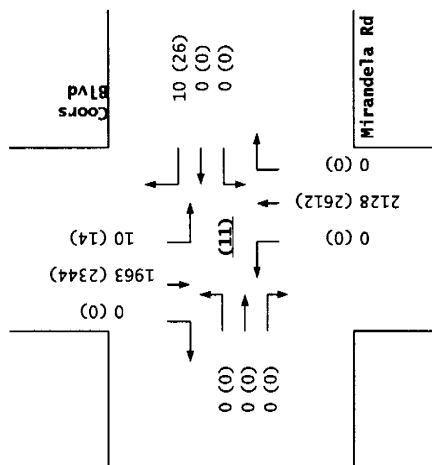


Trips



Mirandela Rd / Coors Blvd

2015
NO BUILD



Timings 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBT	EBL	EBR	WBT	WBL	WBR	NBT	NBL	NBR	SBL	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1185	330	245	229	157	282	1196	659	1398	12
Turn Type	Prot	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Detector Phase	7	4	5	3	8	5	2	3	1	6	7
Switch Phase	7	4	5	3	8	5	2	3	1	6	7
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Total Split (s)	21.0	42.0	15.0	19.0	40.0	15.0	35.0	19.0	24.0	44.0	21.0
Total Split (%)	17.5%	35.0%	12.5%	15.8%	33.3%	12.5%	29.2%	15.8%	20.0%	36.7%	17.5%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	14.4	37.0	52.0	14.0	36.6	10.0	47.0	14.0	36.6	10.0	47.0
Actuated g/C Ratio	0.12	0.31	0.43	0.12	0.30	0.08	0.25	0.41	0.16	0.32	0.49
v/c Ratio	0.69	1.25	0.55	0.81	0.46	1.13	1.08	1.17	1.36	0.95	0.02
Control Delay	59.9	154.8	28.4	68.4	25.3	136.5	73.5	112.0	213.0	52.8	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.9	154.8	28.4	68.4	25.3	136.5	73.5	112.0	213.0	52.8	6.9
LOS	E	F	C	E	C	F	E	F	F	D	A
Approach Delay	117.8	F	F	42.0	F	F	94.0	F	F	103.6	F
Approach LOS	F	F	F	D	F	F	F	F	F	F	F
Intersection Summary											
Cycle Length: 120											
Offset 86 (72%), Referenced to phase 2NBT and 6.SBT, Start of Green											
Natural Cycle: 120											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.36											
Intersection Sigma Delay: 97.5											
Intersection Capacity Utilization 104.0%											
Analysis Period (min) 15											



2015 AM Peak NOBUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Movement	EBT	EBL	EBR	WBT	WBL	WBR	NBT	NBL	NBR	SBL	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1185	330	245	229	157	282	1196	659	1398	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.97	0.91	1.00	0.97	0.91	1.00
Flt	1.00	1.00	0.95	1.00	0.94	1.00	1.00	0.85	1.00	0.95	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3291	3400	5036	1568	3400	5036	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3291	3400	5036	1568	3400	5036	1568
Peak-hour factor, PHF	0.88	0.88	0.88	0.76	0.76	0.76	0.88	0.88	0.88	0.90	0.90
Adj. Flow (vph)	282	1347	375	322	301	207	320	1359	749	732	1553
RTOR Reduction (vph)	0	0	5	0	101	0	0	0	1	0	7
Lane Group Flow (vph)	282	1347	375	322	407	0	320	1359	749	732	1553
Turn Type	Prot	Prot	pm+ov	Prot	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	pm+ov
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	14.4	37.0	47.0	14.0	36.6	10.0	30.0	44.0	19.0	39.0	53.4
Effective Green, g (s)	14.4	37.0	47.0	14.0	36.6	10.0	30.0	44.0	19.0	39.0	53.4
Actuated g/C Ratio	0.12	0.31	0.39	0.12	0.31	0.08	0.25	0.37	0.16	0.32	0.44
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	408	1081	679	397	1004	283	1259	640	538	1637	763
v/c Ratio Prot	0.08	0.38	0.05	0.09	0.12	0.09	0.27	0.14	0.22	0.31	0.00
v/c Ratio Perm			0.19					0.34			0.00
v/c Ratio	0.69	1.25	0.55	0.81	0.40	1.13	1.08	1.17	1.36	0.95	0.01
Uniform Delay, d1	50.7	41.5	28.2	51.7	33.1	55.0	45.0	38.0	50.5	39.5	18.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.21	0.63	0.72	1.00	1.00	1.00
Incremental Delay, d2	5.0	118.6	0.9	11.9	0.3	81.1	44.4	85.4	174.0	13.0	0.0
Delay (s)	55.7	160.1	29.1	63.6	33.3	147.6	73.0	112.9	224.5	52.5	18.5
Level of Service	E	F	C	E	C	F	E	F	F	D	B
Approach Delay (s)			120.9		45.1		96.1			107.1	
Approach LOS			F		D		F			F	
Intersection Summary											
HCM Average Control Delay			100.1		HCM Level of Service						
HCM Volume to Capacity ratio			1.17								
Actuated Cycle Length (s)			120.0		Sum of lost time (s)						
Intersection Capacity Utilization			104.0%		ICU Level of Service						
Analysis Period (min)			15								
c Critical Lane Group											

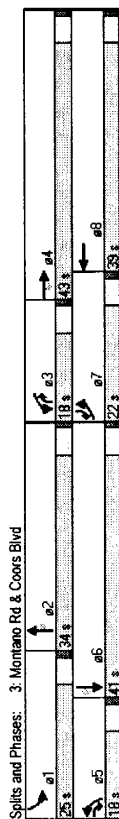
2015 AM Peak NOBUILD Conditions

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Existing Geometry

Timings 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1226	372	339	229	348	1243	659	671	1417	12
Turn Type	Prot	pm-ov	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	pm-ov	7
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases											
Detector Phase	7	4	5	3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	10.0	21.0	10.0	10.0
Total Split (s)	22.0	43.0	18.0	18.0	39.0	18.0	34.0	18.0	25.0	41.0	22.0
Total Split (%)	18.3%	35.8%	15.0%	15.0%	32.5%	15.0%	28.3%	15.0%	20.8%	34.2%	18.3%
Yellow Time (s)	4.0	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	1.0
All-Red Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead-Lag											
Lead-Lag Optimize?											
Recall Mode											
Act Effct Green (s)	15.3	38.0	56.0	13.0	35.7	13.0	29.0	47.0	20.0	36.0	56.3
Actuated g/C Ratio	0.13	0.32	0.47	0.11	0.30	0.11	0.24	0.39	0.17	0.30	0.47
v/c Ratio	0.72	1.25	0.58	1.21	0.47	1.07	1.16	0.69	1.32	1.04	0.02
Control Delay	59.9	158.0	27.2	163.1	26.1	129.0	111.0	19.7	194.1	75.9	7.4
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	59.9	158.0	27.2	163.1	26.1	129.0	111.0	19.7	194.1	75.9	7.4
LOS	E	F	C	F	C	F	F	B	F	E	A
Approach Delay											
Approach LOS											
Intersection Summary											
Cycle Length: 120											
Offset 72 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green											
Natural Cycle: 130											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.32											
Intersection Signal Delay: 103.3											
Intersection Capacity Utilization: 103.4%											
Analysis Period (min): 15											



2015 AM Peak BUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1226	372	339	229	348	1243	659	671	1417	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.97	0.91	0.88	0.97	0.91	1.00
Fit Protected	1.00	1.00	0.85	1.00	0.94	1.00	1.00	0.85	1.00	1.00	0.85
Fit Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3905	1568	3400	3291	3400	5036	2760	3400	5036	1568
Satd. Flow (perm)	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Peak-hour factor, P/H	0.80	0.88	0.88	0.76	0.76	0.76	0.88	0.88	0.90	0.90	0.80
Adj. Flow (vph)	310	1383	423	446	301	207	385	1412	746	1574	13
RTOR Reduction (vph)	0	0	1	0	101	0	0	0	0	0	0
Lane Group Flow (vph)	310	1383	422	446	407	0	395	1412	746	1574	5
Turn Type	Prot	pm-ov	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases											
Actuated Green, G (s)	15.3	38.0	51.0	13.0	35.7	13.0	29.0	42.0	20.0	36.0	51.3
Effective Green, g (s)	15.3	38.0	51.0	13.0	35.7	13.0	29.0	42.0	20.0	36.0	51.3
Actuated g/C Ratio	0.13	0.32	0.42	0.11	0.30	0.11	0.24	0.35	0.17	0.30	0.43
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	434	1110	732	388	979	388	1217	1081	567	1511	736
v/s Ratio Prot	0.09	0.40	0.06	0.13	0.12	0.12	0.28	0.07	0.22	0.31	0.09
v/s Ratio Perm											
v/c Ratio	0.71	1.25	0.58	1.21	0.42	1.07	1.16	0.69	1.32	1.04	0.01
Uniform Delay, d1	50.3	41.0	26.3	53.5	33.8	53.5	45.5	33.4	50.0	42.0	19.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.5	122.2	1.1	118.0	0.3	59.7	78.7	1.3	154.2	34.8	0.0
Delay (s)	55.8	163.2	27.4	171.5	34.1	113.2	124.2	34.7	204.2	76.8	19.7
Level of Service	E	F	C	F	C	F	F	C	F	E	B
Approach Delay (s)											
Approach LOS											
Intersection Summary											
HCM Average Control Delay											
HCM Volume to Capacity ratio											
Actuated Cycle Length (s)											
Intersection Capacity Utilization											
Analysis Period (min)											
Critical Lane Group											

2015 AM Peak BUILD Conditions

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Existing Geometry

Timings 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	278	304	385	402	1114	640	1748	249	333	1562	69
Turn Type	Prot	pm-ov	Prot	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases											
Detector Phase	7	4	5	3	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Total Split (s)	14.0	32.0	25.0	28.0	46.0	25.0	52.0	28.0	18.0	45.0	14.0
Total Split (%)	10.8%	24.6%	19.2%	21.5%	33.4%	19.2%	40.0%	21.5%	13.6%	34.6%	10.8%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	9.0	29.3	54.3	20.7	41.0	20.7	47.0	72.7	13.0	40.0	54.0
Act Eff Green Ratio	0.07	0.23	0.42	0.16	0.32	0.15	0.36	0.56	0.10	0.31	0.42
Act Eff Green Ratio	1.30	0.42	0.65	0.80	1.26	1.28	1.00	0.28	1.06	1.10	0.11
Control Delay	208.1	45.6	35.7	54.2	149.5	175.6	44.6	7.1	121.8	95.9	22.4
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	208.1	45.6	35.7	54.2	149.5	175.6	44.6	7.1	121.8	95.9	22.4
LOS	F	D	D	D	F	F	D	A	F	F	C
Approach LOS											
Intersection Summary											
Cycle Length: 130											
Offset 66 (52%), Referenced to phase 2NBT and 6SBT, Start of Green											
Natural Cycle: 130											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.30											
Intersection Signal Delay: 94.3											
Intersection Capacity Utilization 109.0%											
Analysis Period (min) 15											
Splits and Phases:											
3: Montano Rd & Coors Blvd											

HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	278	304	385	402	1114	640	1748	249	333	1562	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util Factor	0.97	0.95	1.00	0.97	0.95	0.97	0.91	1.00	0.97	0.91	1.00
Flt Protected	1.00	1.00	0.85	1.00	0.98	1.00	1.00	0.85	1.00	1.00	0.85
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3438	3400	5036	1568	3400	5036	1568
Satd. Flow (perm)	3400	3505	1568	3400	3438	3400	5036	1568	3400	5036	1568
Peak-hour factor, PHF	0.91	0.91	0.91	0.93	0.93	0.93	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	305	334	434	432	1198	175	667	1821	259	362	1698
RTOR Reduction (vph)	0	0	8	0	9	0	0	0	44	0	0
Lane Group Flow (vph)	305	334	426	432	1364	0	667	1821	215	362	1698
Turn Type	Prot	pm-ov	Prot	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases											
Actuated Green, G (s)	9.0	29.3	49.3	20.7	41.0	20.7	47.0	67.7	13.0	40.0	49.0
Effective Green, g (s)	9.0	29.3	49.3	20.7	41.0	20.7	47.0	67.7	13.0	40.0	49.0
Actuated g/C Ratio	0.07	0.23	0.38	0.16	0.32	0.15	0.36	0.52	0.10	0.31	0.38
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	235	790	655	541	1084	523	1821	877	340	1550	651
v/c Ratio Prot	0.09	0.10	0.10	0.13	0.40	0.00	0.36	0.04	0.11	0.34	0.01
v/c Ratio Perm											
Uniform Delay, d1	1.30	0.42	0.65	0.80	1.26	1.28	1.00	0.25	1.06	1.10	0.11
Progression Delay, d2	60.5	43.1	33.2	52.6	44.5	55.0	41.5	17.1	58.5	45.0	26.3
Progression Factor	1.00	1.00	1.00	0.90	0.72	0.97	0.68	0.73	1.00	1.00	1.00
Incremental Delay, d2	161.7	0.4	2.3	4.8	120.8	132.8	16.3	0.1	67.0	53.6	0.1
Delay (s)	222.2	43.5	35.8	52.1	152.7	185.9	43.7	12.6	125.5	98.6	26.4
Level of Service	F	D	D	D	F	F	D	B	F	F	C
Approach Delay (s)											
Approach LOS											
Intersection Summary											
HCM Average Control Delay											
HCM Volume to Capacity ratio											
Actuated Cycle Length (s)											
Intersection Capacity Utilization											
Analysis Period (min)											
5 Critical Lane Group											

Timings 4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Configurations	242	39	296	63	13	18	62	1693	88	52	2177
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot
Protected Phases	7	4	4	3	8	8	2	2	2	1	6
Permitted Phases	7	4	4	3	8	8	2	2	2	1	6
Detector Phase	7	4	4	3	8	8	2	2	2	1	6
Switch Phase	7	4	4	3	8	8	2	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	27.0	34.0	34.0	14.0	21.0	21.0	10.0	61.0	61.0	11.0	62.0
Total Split (%)	22.5%	28.3%	28.3%	11.7%	17.5%	17.5%	8.3%	50.8%	50.8%	9.2%	51.7%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	22.0	26.4	26.4	8.6	13.1	13.1	64.0	58.5	58.5	6.5	59.4
Actuated g/C Ratio	0.18	0.22	0.22	0.37	0.11	0.11	0.53	0.48	0.48	0.05	0.50
v/c Ratio	1.01	0.13	0.91	0.67	0.08	0.12	0.52	0.82	0.13	0.61	0.98
Control Delay	101.0	37.0	58.1	79.5	46.9	18.3	28.5	30.4	6.4	78.8	28.5
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	101.0	37.0	58.1	79.5	46.9	18.3	28.5	30.4	6.4	78.8	28.5
LOS	F	D	E	E	D	B	C	C	A	E	C
Approach Delay	75.2	E	E	E	E	E	29.2	C	29.3	C	C
Approach LOS	E	E	E	E	E	E	C	C	E	C	C
Intersection Summary											
Cycle Length: 120											
Actuated Cycle Length: 120											
Offset 0 (0%), Referenced to phase 2 NBT and 6 SBT, Start of Green											
Natural Cycle: 120											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.01											
Intersection Signal Delay: 38.3											
Intersection Capacity Utilization 78.8%											
Analysis Period (min) 15											
Splits and Phases:											
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR	
11 s	11 s	11 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s
10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s

2015 AM Peak NOBUILD Conditions
Existing Geometry
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HCM Signalized Intersection Capacity Analysis 4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Configurations	242	39	296	63	13	18	62	1693	88	52	2177
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot
Protected Phases	7	4	4	3	8	8	2	2	2	1	6
Permitted Phases	7	4	4	3	8	8	2	2	2	1	6
Detector Phase	7	4	4	3	8	8	2	2	2	1	6
Switch Phase	7	4	4	3	8	8	2	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	27.0	34.0	34.0	14.0	21.0	21.0	10.0	61.0	61.0	11.0	62.0
Total Split (%)	22.5%	28.3%	28.3%	11.7%	17.5%	17.5%	8.3%	50.8%	50.8%	9.2%	51.7%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	22.0	26.4	26.4	8.6	13.1	13.1	64.0	58.5	58.5	6.5	59.4
Actuated g/C Ratio	0.18	0.22	0.22	0.37	0.11	0.11	0.53	0.48	0.48	0.05	0.50
v/c Ratio	1.01	0.13	0.91	0.67	0.08	0.12	0.52	0.82	0.13	0.61	0.98
Control Delay	101.0	37.0	58.1	79.5	46.9	18.3	28.5	30.4	6.4	78.8	28.5
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	101.0	37.0	58.1	79.5	46.9	18.3	28.5	30.4	6.4	78.8	28.5
LOS	F	D	E	E	D	B	C	C	A	E	C
Approach Delay	75.2	E	E	E	E	E	29.2	C	29.3	C	C
Approach LOS	E	E	E	E	E	E	C	C	E	C	C
Intersection Summary											
Cycle Length: 120											
Actuated Cycle Length: 120											
Offset 0 (0%), Referenced to phase 2 NBT and 6 SBT, Start of Green											
Natural Cycle: 120											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.01											
Intersection Signal Delay: 38.3											
Intersection Capacity Utilization 78.8%											
Analysis Period (min) 15											
Splits and Phases:											
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR	
11 s	11 s	11 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s	14 s
10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s	10 s

2015 AM Peak NOBUILD Conditions
Existing Geometry
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Timings 4: Delyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	7	7	7	7	7	7	7	7	7
Volume (vph)	270	39	138	34	78	62	1723	116	75
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Prot	Perm
Protected Phases	7	4	3	6	5	2	2	1	6
Permitted Phases	7	4	3	6	8	2	2	1	6
Switch Phase	7	4	3	6	8	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	23.0	34.0	12.0	23.0	23.0	10.0	64.0	10.0	64.0
Total Split (%)	19.2%	28.3%	10.0%	19.2%	19.2%	8.3%	53.3%	8.3%	53.3%
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
All-Red Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	16.6	29.0	7.0	19.4	19.4	64.0	59.0	5.0	59.0
Actuated g/C Ratio	0.14	0.24	0.06	0.16	0.16	0.53	0.49	0.04	0.49
v/c Ratio	0.76	1.00	0.91	0.15	0.32	0.55	0.83	0.17	0.59
Control Delay	61.0	81.1	101.3	45.8	17.5	29.9	5.3	79.7	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	81.1	101.3	45.8	17.5	29.9	5.3	79.7	25.7
LOS	E	F	F	D	B	C	C	A	C
Approach Delay	72.1	72.1	67.3	67.3	28.4	28.4	27.2	27.2	27.2
Approach LOS	E	E	E	E	C	C	C	C	C
Intersection Summary									
Cycle Length: 120									
Actuated Cycle Length: 120									
Offset 0 (0%): Referenced to phase 2 NBT and 6 SBT Start of Green									
Natural Cycle: 100									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 1.00									
Intersection Signal Delay: 35.9									
Intersection Capacity Utilization 87.4%									
Analysis Period (min) 15									
Splits and Phases:									
	g1	g2	g3	g4	g5	g6	g7	g8	g9
	10 s	64 s	12 s	34 s	10 s	64 s	23 s	23 s	23 s

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Existing Geometry
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HCM Signalized Intersection Capacity Analysis 4: Delyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	7	7	7	7	7	7	7	7	7
Volume (vph)	270	39	138	34	78	62	1723	116	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.91	1.00	0.97	0.91
Flt Protected	1.00	0.87	1.00	1.00	0.85	1.00	0.85	1.00	0.85
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (pcu/h)	3400	1600	3400	1845	1568	1752	5036	1568	1568
Peak-hour factor, P.H.F.	0.75	0.75	0.75	0.75	0.75	0.84	0.84	0.89	0.89
Adj. Flow (vph)	360	62	395	181	45	104	74	2051	138
RTOR Reduction (veh)	0	60	0	0	0	68	0	55	0
Lane Group Flow (vph)	360	387	0	181	45	36	74	2051	83
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Prot	Perm
Permitted Phases	7	4	3	8	8	2	1	6	6
Actuated Green, G (s)	16.6	29.0	7.0	19.4	19.4	64.0	59.0	5.0	59.0
Effective Green, g (s)	16.6	29.0	7.0	19.4	19.4	64.0	59.0	5.0	59.0
Actuated g/C Ratio	0.14	0.24	0.06	0.16	0.16	0.53	0.49	0.04	0.49
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	470	387	198	298	253	134	2476	771	142
v/s Ratio Prot	0.11	0.24	0.05	0.02	0.02	0.41	0.02	0.02	0.02
v/c Ratio	0.77	1.00	0.91	0.15	0.14	0.55	0.83	0.11	0.59
Uniform Delay, d1	49.8	45.5	56.2	43.2	43.2	26.8	26.2	16.4	56.5
Progression Factor, d2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.3	45.8	40.5	0.2	0.3	4.9	3.4	0.3	10.4
Delay (s)	57.1	91.3	96.7	43.5	43.5	31.6	29.5	16.7	73.9
Level of Service	E	F	F	D	D	C	C	B	C
Approach Delay (s)	76.1	76.1	72.6	72.6	28.8	28.8	25.8	25.8	25.8
Approach LOS	E	E	E	E	C	C	C	C	C
Intersection Summary									
HCM Average Control Delay									
HCM Volume to Capacity ratio									
Actuated Cycle Length (s)									
Intersection Capacity Utilization									
Analysis Period (min)									
Critical Lane Group									

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Existing Geometry
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Timings 4: Delyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	114	20	106	66	21	38	333	2496	44	21	2068
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Turn Type	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	7	4	3	8	8	2	2	2	1	6	6
Permitted Phases	7	4	4	3	8	8	2	2	1	6	6
Detector Phase	7	4	4	3	8	8	2	2	1	6	6
Switch Phase	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Initial (s)	10.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0
Minimum Split (s)	16.0	22.0	22.0	15.0	21.0	21.0	30.0	83.0	10.0	63.0	53.0
Total Split (%)	12.3%	16.9%	16.9%	11.5%	16.2%	16.2%	23.1%	63.8%	7.7%	48.5%	48.5%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	11.0	9.2	9.2	9.5	7.7	7.7	96.3	84.1	84.1	7.2	62.8
Actuated Cycle Length (s)	0.08	0.07	0.07	0.07	0.06	0.06	0.74	0.65	0.65	0.06	0.48
Actuated g/C Ratio	0.86	0.17	0.54	0.69	0.26	0.36	0.84	0.80	0.04	0.23	0.88
v/c Ratio	103.6	59.1	18.9	84.8	63.2	22.2	53.0	19.8	4.5	63.2	17.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	103.6	59.1	18.9	84.8	63.2	22.2	53.0	19.8	4.5	63.2	17.0
LOS	F	E	B	F	E	C	D	B	A	E	B
Approach Delay	62.5										
Approach LOS	E										
Intersection Summary											
Cycle Length: 130											
Offset: 126 (97%), Referenced to phase 2:NBT, and 6:SBT, Start of Green											
Natural Cycle: 100											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.88											
Intersection Signal Delay: 23.6											
Intersection Capacity Utilization: 85.0%											
Analysis Period (min): 15											

Splits and Phases: 4: Delyne Ave & Coors Blvd



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Existing Geometry
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HCM Signalized Intersection Capacity Analysis 4: Delyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	114	20	106	66	21	38	333	2496	44	21	2068
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85
Satd. Flow (prot)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1568
Flt Permitted	0.95	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85
Satd. Flow (perm)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1568
Peak-hour factor, PHF	0.89	0.89	0.89	0.75	0.75	0.75	0.96	0.96	0.96	0.97	0.97
Adj. Flow (vph)	128	22	119	88	28	51	368	2600	46	22	2130
RTOR Reduction (vph)	0	0	111	0	0	48	0	0	12	0	62
Lane Group Flow (vph)	128	22	8	88	28	3	368	2600	34	22	2130
Turn Type	Prot	Perm	Perm	Prot	Perm	Perm	Perm	Perm	Perm	Prot	Perm
Permitted Phases	7	4	4	3	8	8	2	2	1	6	6
Actuated Green, G (s)	11.0	9.2	9.2	9.5	7.7	7.7	96.3	84.1	84.1	7.2	62.8
Effective Green, g (s)	11.0	9.2	9.2	9.5	7.7	7.7	96.3	84.1	84.1	7.2	62.8
Actuated g/C Ratio	0.08	0.07	0.07	0.07	0.06	0.06	0.74	0.65	0.65	0.06	0.48
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	148	131	111	128	109	93	440	3258	1014	97	2437
v/s Ratio Prot	e0.07	0.01	0.01	0.05	e0.02	0.00	e0.18	0.52	0.02	e0.01	e0.42
v/s Ratio Perm	0.86	0.17	0.08	0.69	0.26	0.03	0.84	0.80	0.03	0.23	0.87
Uniform Delay, d1	58.8	56.8	58.4	58.8	58.4	57.6	40.0	18.8	8.3	58.7	30.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	37.4	0.6	0.3	14.3	1.3	0.1	12.9	2.1	0.1	0.4	1.5
Delay (s)	96.2	57.4	58.7	73.1	59.7	57.8	53.0	18.9	8.3	62.4	15.9
Level of Service	F	E	E	E	E	E	D	B	A	E	B
Approach Delay (s)	75.5										
Approach LOS	E										
Intersection Summary											
HCM Average Control Delay	23.6										
HCM Volume to Capacity ratio	0.82										
Actuated Cycle Length (s)	130.0										
Intersection Capacity Utilization	85.0%										
Analysis Period (min)	15										
c Critical Lane Group											

2015 PM Peak NOBUILD Conditions
Existing Geometry
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Timings
4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	179	20	238	82	70	353	2571	121	75
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Perm	Perm
Protected Phases	7	4	3	8	5	2	2	1	6
Permitted Phases	7	4	3	8	5	2	2	1	6
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	18.0	21.0	18.0	21.0	21.0	28.0	81.0	10.0	63.0
Total Split (%)	13.8%	16.2%	13.8%	16.2%	21.5%	62.3%	7.7%	48.5%	48.5%
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
All-Red Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.0	11.8	13.0	12.8	12.8	90.2	78.7	6.5	59.1
Actuated g/C Ratio	0.08	0.09	0.10	0.10	0.10	0.89	0.81	0.05	0.45
v/c Ratio	0.64	0.56	0.93	0.60	0.42	0.90	0.88	0.13	0.93
Control Delay	66.6	22.0	91.2	69.5	22.7	63.8	26.6	4.7	80.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.6	22.0	91.2	69.5	22.7	63.8	26.6	4.7	80.1
LOS	E	C	F	E	C	E	C	A	B
Approach Delay	48.2								18.2
Approach LOS	D								B
Intersection Summary									
Cycle Length: 130									
Actuated Cycle Length: 130									
Offset: 120 (92%), Referenced to phase 2: NBT, and 6: SBT, Start of Green									
Natural Cycle: 110									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.93									
Intersection Signal Delay: 30.6									
Intersection Capacity Utilization: 90.5%									
Analysis Period (min): 15									

Splits and Phases: 4: Dellyne Ave & Coors Blvd



2015 PM Peak BUILD Conditions
Existing Geometry
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HCM Signalized Intersection Capacity Analysis
4: Dellyne Ave & Coors Blvd

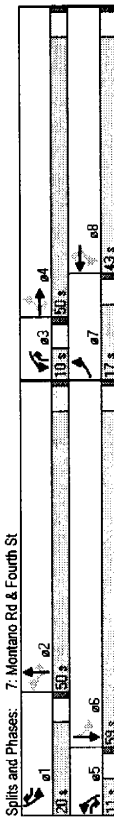
Terry O. Brown, PE
11/22/2011 - Synchro 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	179	20	238	82	70	353	2571	121	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.91	1.00	0.97	0.91
Flt	1.00	0.87	1.00	1.00	0.85	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3400	1611	3400	1845	1568	1752	5036	1568	3400
Satd. Flow (perm)	3400	1611	3400	1845	1568	115	5036	1568	3400
Peak-hour factor, PHF	0.89	0.89	0.89	0.75	0.75	0.96	0.96	0.96	0.97
Adj. Flow (vph)	201	22	119	315	109	93	368	126	77
RTOR Reduction (vph)	0	108	0	0	0	67	0	34	0
Lane Group Flow (vph)	201	33	0	315	109	26	368	92	77
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Perm	Perm
Permitted Phases	7	4	3	8	5	2	2	1	6
Actuated Green, G (s)	12.0	11.8	13.0	12.8	12.8	90.2	78.7	6.5	59.1
Effective Green, g (s)	12.0	11.8	13.0	12.8	12.8	90.2	78.7	6.5	59.1
Actuated g/C Ratio	0.09	0.09	0.10	0.10	0.10	0.89	0.81	0.05	0.45
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	146	340	182	154	408	3049	949	170
v/s Ratio Prot	0.06	0.02	0.09	0.06	0.18	0.53	0.06	0.02	0.42
v/c Ratio	0.64	0.22	0.93	0.60	0.17	0.90	0.88	0.10	0.45
Uniform Delay, d1	56.9	54.9	58.0	56.1	53.7	41.8	21.6	10.8	33.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98
Incremental Delay, d2	4.4	0.8	30.3	5.2	0.5	22.6	4.0	0.2	0.9
Delay (s)	61.3	55.6	88.4	61.4	54.3	64.4	25.6	11.0	34.4
Level of Service	E	E	F	E	D	E	C	B	A
Approach Delay (s)	59.0								18.7
Approach LOS	E								B
Intersection Summary									
HCM Average Control Delay	30.9								C
HCM Volume to Capacity ratio	0.82								10.0
Actuated Cycle Length (s)	130.0								E
Intersection Capacity Utilization	90.5%								E
Analysis Period (min)	15								
Critical Lane Group									

2015 PM Peak BUILD Conditions
Existing Geometry
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Timings 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	157	1238	505	127	378	69	218	424	188	204	516	416
Volume (vph)	157	1238	505	127	378	69	218	424	188	204	516	416
Turn Type	pm-pt	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	6
Permitted Phases	4	4	4	8	8	2	2	2	2	2	2	2
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	6
Switch Phase	7	4	5	3	8	1	5	2	3	1	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	21.0	21.0
Total Split (s)	17.0	50.0	11.0	10.0	43.0	20.0	11.0	50.0	10.0	20.0	50.0	50.0
Total Split (%)	13.1%	38.5%	8.5%	7.7%	33.1%	15.4%	8.5%	38.5%	7.7%	15.4%	45.4%	45.4%
Yellow Time (s)	4.0	4.0	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	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	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	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Eff Green (s)	54.9	45.0	56.0	43.5	38.6	57.2	52.3	46.3	56.3	64.9	54.0	54.0
Actuated g/C Ratio	0.42	0.35	0.43	0.34	0.30	0.44	0.40	0.36	0.43	0.50	0.42	0.42
v/c Ratio	0.50	1.19	0.73	1.29	0.46	0.12	0.99	0.41	0.32	0.53	1.42d	1.42d
Control Delay	29.4	131.5	27.2	207.0	39.1	4.6	79.1	33.1	17.9	23.5	113.6	113.6
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	29.4	131.5	27.2	207.0	39.1	4.6	79.1	33.1	17.9	23.5	113.6	113.6
LOS	C	F	C	F	D	A	E	C	B	C	F	F
Approach Delay	96.5	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
Approach LOS	F	F	F	F	F	F	F	F	F	F	F	F
Intersection Summary												
Cycle Length: 130												
Actuated Cycle Length: 130												
Natural Cycle: 130												
Control Type: Semi Act-Unscoord												
Maximum v/c Ratio: 1.29												
Intersection Signal Delay: 86.2												
Intersection Capacity Utilization: 113.2%												
Analysis Period (min): 15												
dr Deflecto Right Lane. Recode with 1 through lane as a right lane.												



2015 AM Peak NOBUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	157	1238	505	127	378	69	218	424	188	204	516	416
Volume (vph)	157	1238	505	127	378	69	218	424	188	204	516	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	0.95
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95
Flt Permitted	0.32	1.00	1.00	0.10	1.00	1.00	0.09	1.00	1.00	0.33	1.00	0.33
Satd. Flow (pm)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3155	3155
Peak-hour factor, PHF	0.90	0.90	0.90	0.79	0.79	0.79	0.83	0.83	0.83	0.83	0.91	0.91
Adj. Flow (vph)	174	1442	561	161	478	87	263	511	227	224	567	1129
RTOR Reduction (vph)	0	0	103	0	0	52	0	0	43	0	143	0
Lane Group Flow (vph)	174	1442	468	161	478	35	263	511	184	224	1553	0
Turn Type	pm-pt	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt	pm-ov	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	6
Permitted Phases	4	4	4	8	8	2	2	2	2	2	2	2
Actuated Green, G (s)	55.0	45.0	51.0	43.6	38.6	52.3	46.3	51.3	51.3	55.0	54.0	54.0
Effective Green, g (s)	55.0	45.0	51.0	43.6	38.6	52.3	46.3	51.3	51.3	55.0	54.0	54.0
Actuated g/C Ratio	0.42	0.35	0.39	0.34	0.30	0.40	0.40	0.36	0.39	0.50	0.42	0.42
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	349	1213	675	124	1041	691	267	1248	679	425	1311	1311
v/s Ratio Prot	0.04	0.41	0.63	0.05	0.14	0.01	0.05	0.15	0.01	0.06	0.49	0.49
v/s Ratio Perm	0.17	0.26	0.38	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.21	0.21
v/c Ratio	0.50	1.19	0.68	1.30	0.46	0.05	0.99	0.41	0.27	0.53	1.42d	1.42d
Uniform Delay, d1	25.1	42.5	32.7	41.7	37.2	34.8	31.5	26.7	19.8	38.0	100	100
Progression Factor, d2	1.1	93.4	2.7	181.1	0.3	0.0	50.5	1.0	0.2	1.2	91.0	91.0
Incremental Delay, d2	26.2	135.9	35.4	222.8	37.5	23.7	85.3	32.5	26.9	20.9	128.0	128.0
Delay (s)	C	F	D	F	D	C	F	C	C	C	F	F
Level of Service	C	F	D	F	D	C	F	C	C	C	F	F
Approach Delay (s)	101.3	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
Approach LOS	F	F	F	F	F	F	F	F	F	F	F	F
Intersection Summary												
HCM Average Control Delay	93.6											
HCM Volume to Capacity ratio	1.25											
Actuated Cycle Length (s)	130.0											
Intersection Capacity Utilization	113.2%											
Analysis Period (min)	15											
dr Deflecto Right Lane. Recode with 1 through lane as a right lane.												
c Critical Lane Group												

2015 AM Peak NOBUILD Conditions

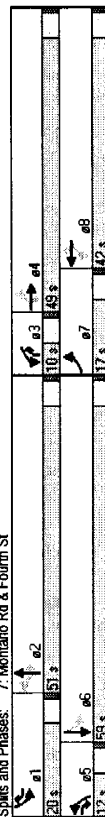
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Existing Geometry

Timings 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	172	1333	551	127	387	69	274	424	188	204	516
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	4	4	5	3	8	1	5	2	3	1	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Initial (s)	10.0	21.0	10.0	10.0	10.0	10.0	21.0	10.0	10.0	10.0	21.0
Minimum Split (s)	17.0	48.0	12.0	10.0	42.0	20.0	12.0	51.0	10.0	20.0	58.0
Total Split (%)	13.1%	37.7%	9.2%	7.7%	32.3%	15.4%	9.2%	39.2%	7.7%	15.4%	45.5%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	Max
Recall Mode	None	None	None	None	None	None	None	None	None	None	Max
Act Effct Green (s)	54.0	44.0	56.0	42.4	37.4	56.0	54.4	47.4	57.4	65.7	54.0
Actuated g/C Ratio	0.42	0.34	0.43	0.33	0.29	0.43	0.42	0.36	0.44	0.51	0.42
v/c Ratio	0.57	1.25	0.79	1.30	0.49	0.12	1.13	0.40	0.31	0.52	1.46dr
Control Delay	32.3	156.2	31.5	211.5	40.4	4.7	119.7	32.2	17.2	22.8	123.1
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	32.3	156.2	31.5	211.5	40.4	4.7	119.7	32.2	17.2	22.8	123.1
LOS	C	F	C	F	D	A	F	C	B	C	F
Approach Delay	112.4	73.5	E	E	E	E	E	E	E	E	F
Approach LOS	F	F	E	E	E	E	E	E	E	E	F
Intersection Summary											
Cycle Length: 130											
Actuated Cycle Length: 130											
Natural Cycle: 130											
Control Type: Semi Act-Uncoord											
Maximum v/c Ratio: 1.30											
Intersection Signal Delay: 97.4											
Intersection Capacity Utilization 116.4%											
Analysis Period (min) 15											
dr Deflecto Right Lane. Recode with 1 through lane as a right lane.											

Splits and Phases: 7: Montano Rd & Fourth St



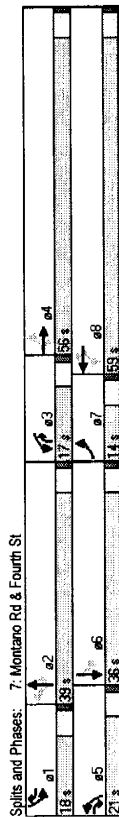
HCM Signalized Intersection Capacity Analysis 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	172	1333	551	127	387	69	274	424	188	204	516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95
Flt Protected	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.90
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3153
Flt Permitted	0.30	1.00	1.00	0.11	1.00	1.00	0.08	1.00	1.00	0.34	1.00
Satd. Flow (perm)	554	3505	1568	197	3505	1568	302	3505	1568	618	3153
Peak-hour factor, P/H	0.90	0.90	0.90	0.79	0.79	0.79	0.83	0.83	0.83	0.91	0.91
Adj. Flow (vph)	191	1481	612	161	490	87	330	511	227	224	567
RTOR Reduction (vph)	0	0	103	0	0	53	0	0	44	0	136
Lane Group Flow (vph)	191	1481	509	161	490	34	330	511	183	224	1883
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	4	4	5	3	8	1	5	2	3	1	6
Actuated Green, G (s)	54.0	44.0	51.0	42.4	37.4	51.0	54.4	47.4	52.4	66.0	54.0
Effective Green, g (s)	54.0	44.0	51.0	42.4	37.4	51.0	54.4	47.4	52.4	66.0	54.0
Actuated g/C Ratio	0.42	0.34	0.39	0.33	0.29	0.39	0.42	0.36	0.40	0.51	0.42
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	337	1166	675	124	1008	675	293	1278	692	432	1310
v/s Ratio Prot	0.05	0.42	0.04	0.05	0.14	0.01	0.06	0.15	0.01	0.05	0.50
v/s Ratio Perm	0.18	0.28	0.37	0.28	0.37	0.02	0.41	0.11	0.11	0.21	0.21
v/c Ratio	0.57	1.25	0.75	1.30	0.49	0.05	1.13	0.40	0.27	0.52	1.46dr
Uniform Delay, d1	26.1	43.0	34.1	42.4	36.3	24.5	32.4	30.7	25.9	19.2	38.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	119.1	4.8	181.1	0.4	0.0	91.0	0.9	0.2	1.1	101.3
Delay (s)	28.3	162.1	38.8	223.5	36.7	24.5	123.5	31.7	26.1	20.2	139.3
Level of Service	C	F	D	F	D	C	F	C	C	C	F
Approach Delay (s)	117.9	F	F	77.4	E	E	58.8	E	F	F	F
Approach LOS	F	F	F	E	E	E	E	E	F	F	F
Intersection Summary											
HCM Average Control Delay	104.9										
HCM Volume to Capacity ratio	1.22										
Actuated Cycle Length (s)	130.0										
Intersection Capacity Utilization	116.4%										
Analysis Period (min)	15										
c Critical Lane Group											

dr Deflecto Right Lane. Recode with 1 through lane as a right lane.

Timings 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	149	620	264	160	1276	202	438	585	186	178	520
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	4	4	4	8	8	2	2	2	2	2	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	14.0	55.0	21.0	17.0	59.0	18.0	21.0	39.0	17.0	18.0	36.0
Total Split (%)	10.8%	43.1%	16.2%	13.1%	45.4%	13.8%	16.2%	30.0%	13.1%	13.8%	27.7%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	None	None	None	None	C-Max
Act Effct Green (s)	60.9	51.9	72.9	65.1	54.0	71.5	50.4	34.5	50.6	43.5	31.0
Actuated g/C Ratio	0.47	0.40	0.56	0.50	0.42	0.39	0.39	0.27	0.39	0.33	0.24
v/c Ratio	0.88	0.47	0.30	0.48	0.36	0.25	0.33	0.68	0.27	0.71	0.89
Control Delay	74.7	39.2	17.8	21.0	53.5	11.3	59.7	47.4	8.5	42.8	59.7
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	74.7	39.2	17.8	21.0	53.5	11.3	59.7	47.4	8.5	42.8	59.7
LOS	E	D	B	C	D	D	B	E	D	A	E
Approach Delay	38.9				45.1			46.5			56.2
Approach LOS	D				D			D			E
Intersection Summary											
Cycle Length: 130											
Actuated Cycle Length: 130											
Offset: 44 (34%), Referenced to phase 2-NBTL and 6-SBTL Start of Green											
Natural Cycle: 90											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.88											
Intersection Signal Delay: 46.1											
Intersection Capacity Utilization: 91.8%											
Analysis Period (min): 15											



2015 PM Peak NOBUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis 7: Montano Rd & Fourth St Terry O. Brown, PE 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	149	620	264	160	1276	202	438	585	186	178	520	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.85	1.00	0.97
Fit Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.85	1.00	0.97
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3388	1752
Satd. Flow (perm)	142	3505	1568	530	3505	1568	415	3505	1568	433	3388	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	157	653	278	176	1402	222	492	636	187	193	571	164
RTOR Restriction (vph)	0	0	57	0	0	31	0	0	92	0	21	0
Lane Group Flow (vph)	157	653	221	176	1402	191	492	635	95	153	714	0
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Permitted Phases	4	4	4	8	8	2	2	2	2	2	6	6
Actuated Green, G (s)	60.9	51.9	67.9	65.1	54.0	66.5	50.5	34.5	45.6	43.5	31.0	31.0
Effective Green, g (s)	60.9	51.9	67.9	65.1	54.0	66.5	50.5	34.5	45.6	43.5	31.0	31.0
Actuated g/C Ratio	0.47	0.40	0.52	0.50	0.42	0.51	0.39	0.27	0.35	0.33	0.24	0.24
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1399	879	370	1455	862	529	930	610	272	808	272
v/c Ratio Prot	0.06	0.19	0.03	0.04	0.04	0.02	0.11	0.18	0.01	0.07	0.21	0.01
v/c Ratio Perm	0.35	0.11	0.11	0.20	0.10	0.25	0.33	0.68	0.16	0.71	0.88	0.16
v/c Ratio	0.88	0.47	0.25	0.48	0.36	0.22	0.53	0.88	0.16	0.71	0.88	0.16
Uniform Delay, d1	32.3	28.8	17.1	19.2	37.0	17.5	35.9	42.8	29.0	33.2	47.8	33.2
Progression Factor, d2	1.24	1.30	2.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	33.6	0.2	0.1	1.0	15.6	0.1	23.2	4.1	0.1	8.2	13.5	8.2
Delay (s)	73.5	37.8	34.8	20.2	52.6	17.6	59.0	46.9	29.1	41.5	61.3	41.5
Level of Service	E	D	C	C	D	B	E	D	C	D	E	E
Approach Delay (s)	42.2				45.1			48.3			57.2	
Approach LOS	D				D			D			E	
Intersection Summary												
HCM Average Control Delay	47.6											
HCM Volume to Capacity ratio	0.92											
Actuated Cycle Length (s)	130.0											
Intersection Capacity Utilization	91.8%											
Analysis Period (min)	15											
Critical Lane Group												

2015 PM Peak NOBUILD Conditions

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Existing Geometry

Timings
7: Montano Rd & Fourth St

Terry O. Brown, PE
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	201	639	388	160	1311	202	572	585	166	176	520
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	4	4	4	8	8	2	2	2	2	6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	10.0	21.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	16.0	55.0	25.0	17.0	56.0	20.0	25.0	38.0	17.0	20.0	33.0
Total Split (%)	12.3%	42.3%	19.2%	13.1%	15.4%	15.4%	19.2%	28.2%	13.1%	15.4%	25.4%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	61.9	50.9	75.9	62.1	51.0	69.6	53.0	34.4	50.5	41.6	28.0
Act Effct Green Ratio	0.46	0.39	0.58	0.46	0.39	0.54	0.41	0.26	0.39	0.32	0.22
v/c Ratio	1.03	0.49	0.42	0.50	1.05	0.26	1.02	0.68	0.27	0.67	1.05
Control Delay	105.5	31.5	11.5	22.2	76.4	12.6	76.4	47.7	8.7	38.9	94.2
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	105.5	31.5	11.5	22.2	76.4	12.6	76.4	47.7	8.7	38.9	94.2
LOS	F	C	B	C	E	B	E	D	A	D	F
Approach Delay											
Approach LOS											
Intersection Summary											
Cycle Length: 130											
Actuated Cycle Length: 130											
Natural Cycle: 110											
Control Type: Semi Act-Uncoord											
Maximum v/c Ratio: 1.05											
Intersection Signal Delay: 58.8											
Intersection Capacity Utilization: 101.3%											
Analysis Period (min): 15											
Splits and Phases:	7: Montano Rd & Fourth St										
	a1	a2	a3	a4	a5	a6	a7	a8			
	20 s	38 s	17 s	55 s	25 s	15 s	55 s	55 s			

2015 PM Peak BUILD Conditions
Existing Geometry
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HCM Signalized Intersection Capacity Analysis
7: Montano Rd & Fourth St

Terry O. Brown, PE
11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	201	639	388	160	1311	202	572	585	166	176	520	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	0.85	1.00	0.95	1.00	0.85	1.00	0.85	1.00	0.95
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Flt Permitted	0.08	1.00	1.00	0.28	1.00	0.12	1.00	0.12	1.00	0.26	1.00	0.08
Satd. Flow (perm)	145	3505	1568	523	3505	1568	434	3505	1568	476	3556	476
Peak-hour factor, PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	212	673	408	176	1441	222	643	635	167	193	571	225
RTOR Reduction (vph)	0	0	57	0	0	27	0	0	92	0	32	0
Lane Group Flow (vph)	212	673	351	176	1441	195	643	635	95	193	764	0
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	4	4	4	8	8	2	2	2	2	6	6	6
Actuated Green, G (s)	61.9	50.9	70.9	62.1	51.0	64.6	53.0	34.4	45.5	41.6	28.0	28.0
Effective Green, g (s)	61.9	50.9	70.9	62.1	51.0	64.6	53.0	34.4	45.5	41.6	28.0	28.0
Actuated g/C Ratio	0.46	0.39	0.55	0.46	0.39	0.50	0.41	0.26	0.35	0.32	0.22	0.22
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	205	1372	915	355	1375	839	633	927	609	286	723	723
v/c Ratio Prot	0.009	0.19	0.06	0.04	0.04	0.02	0.02	0.01	0.01	0.07	0.23	0.23
v/c Ratio Perm	0.40	0.16	0.16	0.19	0.19	0.16	0.16	0.16	0.16	0.16	0.15	0.15
v/c Ratio	1.03	0.49	0.38	0.50	1.05	0.23	1.02	0.68	0.16	0.67	1.06	1.06
Uniform Delay, d1	38.6	29.8	17.0	20.8	39.5	18.6	39.5	42.9	29.0	34.3	51.0	51.0
Progression 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
Incremental Delay, d2	72.1	0.3	0.3	1.1	37.9	0.1	39.8	2.1	0.1	6.2	49.4	49.4
Delay (s)	110.6	30.1	17.3	21.9	77.4	18.7	79.3	45.0	29.2	40.5	100.4	100.4
Level of Service	F	C	B	C	E	B	E	D	C	D	F	F
Approach Delay (s)												
Approach LOS												
Intersection Summary												
HCM Average Control Delay												
HCM Volume to Capacity ratio												
Actuated Cycle Length (s)												
Intersection Capacity Utilization												
Analysis Period (min)												
Critical Lane Group												

2015 PM Peak BUILD Conditions
Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/22/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	2154	31	95	437	53	0	0	64	0	0	31
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	33	2534	36	114	527	64	0	0	75	0	0	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)		801										
pX, platoon unblocked				0.71			0.71	0.71	0.71	0.71	0.71	
vC, conflicting volume	590			2571			3129	3419	1267	2196	3424	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			2393			3182	3593	551	1863	3599	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			17			100	100	78	100	100	95
cM capacity (veh/h)	974			138			1	1	337	7	1	698
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	33	1267	1267	36	114	351	239	75	36			
Volume Left	33	0	0	0	114	0	0	0	0			
Volume Right	0	0	0	36	0	0	64	75	36			
cSH	974	1700	1700	1700	138	1700	1700	337	698			
Volume to Capacity	0.03	0.75	0.75	0.02	0.83	0.21	0.14	0.22	0.05			
Queue Length 95th (ft)	3	0	0	0	131	0	0	21	4			
Control Delay (s)	8.8	0.0	0.0	0.0	98.7	0.0	0.0	18.7	10.4			
Lane LOS	A				F			C	B			
Approach Delay (s)	0.1				16.0			18.7	10.4			
Approach LOS								C	B			
Intersection Summary												
Average Delay				3.9								
Intersection Capacity Utilization			71.5%		ICU Level of Service				C			
Analysis Period (min)			15									

2015 AM Peak NOBUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/22/2011 - Synchro 7

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (veh/h)	29	2163	37	100	519	53	0	0	141	0	0	34	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	34	2545	44	120	625	64	0	0	166	0	0	40	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type		None			None								
Median storage (veh)													
Upstream signal (ft)		801											
pX, platoon unblocked				0.70			0.70		0.70	0.70	0.70	0.70	
vC, conflicting volume	689			2588			3207		3543	1272	2405	3555	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	689			2411			3295		3777	529	2148	3793	
tC, single (s)	4.2			4.2			7.6		6.6	7.0	7.6	6.6	
tC, 2 stage (s)													
tF (s)	2.2			2.2			3.5		4.0	3.3	3.5	4.0	
p0 queue free %	96			10			100		100	52	100	100	
cM capacity (veh/h)	894			134			0		0	344	2	0	
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	34	1272	1272	44	120	417	272	166	40				
Volume Left	34	0	0	0	120	0	0	0	0				
Volume Right	0	0	0	44	0	0	64	166	40				
cSH	894	1700	1700	1700	134	1700	1700	344	649				
Volume to Capacity	0.04	0.75	0.75	0.03	0.90	0.25	0.16	0.48	0.06				
Queue Length 95th (ft)	3	0	0	0	148	0	0	63	5				
Control Delay (s)	9.2	0.0	0.0	0.0	115.8	0.0	0.0	24.9	10.9				
Lane LOS	A				F			C	B				
Approach Delay (s)	0.1				17.2			24.9	10.9				
Approach LOS								C	B				
Intersection Summary													
Average Delay	5.2												
Intersection Capacity Utilization	75.2%												
Analysis Period (min)	15												
ICU Level of Service D													

2015 AM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/22/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	786	16	75	1434	342	0	0	63	0	0	73
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	63	810	16	79	1509	360	0	0	74	0	0	86
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	801											
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	1869			827			1935	2963	405	2452	2800	935
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1869			748			1896	2962	311	2433	2793	935
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	80			90			100	100	89	100	100	68
cM capacity (veh/h)	314			820			21	10	658	11	13	265
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	63	405	405	16	79	1006	863	74	86			
Volume Left	63	0	0	0	79	0	0	0	0			
Volume Right	0	0	0	16	0	0	360	74	86			
cSH	314	1700	1700	1700	820	1700	1700	658	265			
Volume to Capacity	0.20	0.24	0.24	0.01	0.10	0.59	0.51	0.11	0.32			
Queue Length 95th (ft)	18	0	0	0	8	0	0	9	34			
Control Delay (s)	19.3	0.0	0.0	0.0	9.9	0.0	0.0	11.2	25.0			
Lane LOS	C				A			B	C			
Approach Delay (s)	1.4				0.4			11.2	25.0			
Approach LOS								B	C			
Intersection Summary												
Average Delay	1.7											
Intersection Capacity Utilization	61.7%											
Analysis Period (min)	15											
ICU Level of Service B												

2015 PM Peak NOBUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/22/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	66	853	29	324	1409	342	0	0	189	0	0	78
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	68	879	30	341	1483	360	0	0	222	0	0	92
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		801										
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	1843			909			2531	3541	440	3143	3391	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1843			824			2512	3563	335	3149	3407	922
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	79			55			100	100	65	100	100	66
cM capacity (veh/h)	322			764			5	2	632	2	3	270
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	68	440	440	30	341	989	854	222	92			
Volume Left	68	0	0	0	341	0	0	0	0			
Volume Right	0	0	0	30	0	0	360	222	92			
cSH	322	1700	1700	1700	764	1700	1700	632	270			
Volume to Capacity	0.21	0.26	0.26	0.02	0.45	0.58	0.50	0.35	0.34			
Queue Length 95th (ft)	20	0	0	0	58	0	0	39	36			
Control Delay (s)	19.2	0.0	0.0	0.0	13.4	0.0	0.0	13.8	25.0			
Lane LOS	C				B			B	C			
Approach Delay (s)	1.3				2.1			13.8	25.0			
Approach LOS								B	C			
Intersection Summary												
Average Delay	3.2											
Intersection Capacity Utilization	61.4%											
ICU Level of Service	B											
Analysis Period (min)	15											

2015 PM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis

8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE

11/22/2011 - Synchro 7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↕	↱	↰	↕	↱			↰			↱
Volume (veh/h)	29	2113	123	100	519	53	0	0	191	0	0	34
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	34	2486	145	120	625	64	0	0	225	0	0	40
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		801										
pX, platoon unblocked				0.70			0.70	0.70	0.70	0.70	0.70	
vC, conflicting volume	689			2631			3148	3484	1243	2434	3597	345
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	689			2472			3211	3693	487	2191	3854	345
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			5			100	100	39	100	100	94
cM capacity (veh/h)	894			127			0	0	366	1	0	649

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	34	1243	1243	145	120	417	272	225	40
Volume Left	34	0	0	0	120	0	0	0	0
Volume Right	0	0	0	145	0	0	64	225	40
cSH	894	1700	1700	1700	127	1700	1700	366	649
Volume to Capacity	0.04	0.73	0.73	0.09	0.95	0.25	0.16	0.61	0.06
Queue Length 95th (ft)	3	0	0	0	159	0	0	98	5
Control Delay (s)	9.2	0.0	0.0	0.0	133.0	0.0	0.0	29.2	10.9
Lane LOS	A				F			D	B
Approach Delay (s)	0.1				19.8			29.2	10.9
Approach LOS								D	B

Intersection Summary	
Average Delay	6.2
Intersection Capacity Utilization	76.9%
Analysis Period (min)	15
ICU Level of Service	D

2015 AM Peak BUILD Conditions w/No RI,RO on Montano

Existing Geometry

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A-70a

HCM Unsignalized Intersection Capacity Analysis

8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/22/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	66	750	170	324	1409	342	0	0	292	0	0	78
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	68	773	175	341	1483	360	0	0	344	0	0	92
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		801										
pX, platoon unblocked												
vC, conflicting volume	1843			948			2425	3435	387	3211	3430	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1843			948			2425	3435	387	3211	3430	922
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	79			52			100	100	44	100	100	66
cM capacity (veh/h)	322			713			6	3	609	1	3	270
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	68	387	387	175	341	989	854	344	92			
Volume Left	68	0	0	0	341	0	0	0	0			
Volume Right	0	0	0	175	0	0	360	344	92			
cSH	322	1700	1700	1700	713	1700	1700	609	270			
Volume to Capacity	0.21	0.23	0.23	0.10	0.48	0.58	0.50	0.56	0.34			
Queue Length 95th (ft)	20	0	0	0	65	0	0	88	36			
Control Delay (s)	19.2	0.0	0.0	0.0	14.6	0.0	0.0	18.3	25.0			
Lane LOS	C				B			C	C			
Approach Delay (s)	1.3				2.3			18.3	25.0			
Approach LOS								C	C			
Intersection Summary												
Average Delay			4.1									
Intersection Capacity Utilization			61.4%		ICU Level of Service				B			
Analysis Period (min)			15									

2015 PM Peak BUILD Conditions - No RI,RO on Montano

Existing Geometry
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A-706

HCM Unsignalized Intersection Capacity Analysis 9: Montano Rd & Antequera Ave

Terry O. Brown, PE
11/22/2011 - Synchro 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	2459	86	0	724	0	50
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	2893	101	0	852	0	59
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.69		0.69	0.69
vC, conflicting volume			2994		3319	1446
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2991		3461	753
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	76
cM capacity (veh/h)			77		3	242
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	1446	1446	101	426	426	59
Volume Left	0	0	0	0	0	0
Volume Right	0	0	101	0	0	59
cSH	1700	1700	1700	1700	1700	242
Volume to Capacity	0.85	0.85	0.06	0.25	0.25	0.24
Queue Length 95th (ft)	0	0	0	0	0	23
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	24.6
Lane LOS						C
Approach Delay (s)	0.0			0.0		24.6
Approach LOS						C
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			78.0%		ICU Level of Service	D
Analysis Period (min)			15			

2015 AM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 9: Montano Rd & Antequera Ave

Terry O. Brown, PE
11/22/2011 - Synchro 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Volume (veh/h)	851	141	0	1714	0	103
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.85	0.85
Hourly flow rate (vph)	896	148	0	1804	0	121
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)	385					
pX, platoon unblocked			0.91		0.91	0.91
vC, conflicting volume			1044		1798	448
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			839		1672	180
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	84
cM capacity (veh/h)			711		78	750
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	448	448	148	902	902	121
Volume Left	0	0	0	0	0	0
Volume Right	0	0	148	0	0	121
cSH	1700	1700	1700	1700	1700	750
Volume to Capacity	0.26	0.26	0.09	0.53	0.53	0.16
Queue Length 95th (ft)	0	0	0	0	0	14
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.7
Lane LOS						B
Approach Delay (s)	0.0				0.0	10.7
Approach LOS						B
Intersection Summary						
Average Delay	0.4					
Intersection Capacity Utilization	50.7%			ICU Level of Service		A
Analysis Period (min)	15					

2015 PM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis

10: E-W St & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	69	2191	48	0	2130		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90		
Hourly flow rate (vph)	0	81	2434	53	0	2367		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage (veh)								
Upstream signal (ft)						707		
pX, platoon unblocked	0.72							
vC, conflicting volume	3250	635			2488			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	2761	635			2488			
tC, single (s)	6.9	7.0			4.2			
tC, 2 stage (s)								
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	81			100			
cM capacity (veh/h)	11	419			179			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	81	696	696	696	401	789	789	789
Volume Left	0	0	0	0	0	0	0	0
Volume Right	81	0	0	0	53	0	0	0
cSH	419	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.19	0.41	0.41	0.41	0.24	0.46	0.46	0.46
Queue Length 95th (ft)	18	0	0	0	0	0	0	0
Control Delay (s)	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	15.7	0.0				0.0		
Approach LOS	C							
Intersection Summary								
Average Delay			0.3					
Intersection Capacity Utilization			44.5%		ICU Level of Service		A	
Analysis Period (min)			15					

2015 AM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis 10: E-W St & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	225	2738	125	0	2552		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.85	0.85	0.96	0.96	0.96	0.96		
Hourly flow rate (vph)	0	265	2852	130	0	2658		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage (veh)								
Upstream signal (ft)						707		
pX, platoon unblocked	0.72							
vC, conflicting volume	3803	778			2982			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	3529	778			2982			
tC, single (s)	6.9	7.0			4.2			
tC, 2 stage (s)								
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	21			100			
cM capacity (veh/h)	3	337			113			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	265	815	815	815	538	886	886	886
Volume Left	0	0	0	0	0	0	0	0
Volume Right	265	0	0	0	130	0	0	0
cSH	337	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.79	0.48	0.48	0.48	0.32	0.52	0.52	0.52
Queue Length 95th (ft)	161	0	0	0	0	0	0	0
Control Delay (s)	45.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E							
Approach Delay (s)	45.6	0.0				0.0		
Approach LOS	E							
Intersection Summary								
Average Delay		2.0						
Intersection Capacity Utilization		62.4%		ICU Level of Service		B		
Analysis Period (min)		15						

2015 PM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations			  			  			
Volume (veh/h)	0	10	2128	10	10	1963			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90			
Hourly flow rate (vph)	0	12	2364	11	11	2181			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage (veh)									
Upstream signal (ft)			1190						
pX, platoon unblocked	0.64	0.64			0.64				
vC, conflicting volume	3114	788			2376				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2347	0			1201				
tC, single (s)	6.9	7.0			4.2				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	98			97				
cM capacity (veh/h)	19	696			368				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	12	788	788	788	11	11	727	727	727
Volume Left	0	0	0	0	0	11	0	0	0
Volume Right	12	0	0	0	11	0	0	0	0
cSH	696	1700	1700	1700	1700	368	1700	1700	1700
Volume to Capacity	0.02	0.46	0.46	0.46	0.01	0.03	0.43	0.43	0.43
Queue Length 95th (ft)	1	0	0	0	0	2	0	0	0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0
Lane LOS	B					C			
Approach Delay (s)	10.3	0.0				0.1			
Approach LOS	B								
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization			51.1%		ICU Level of Service			A	
Analysis Period (min)			15						

2015 AM Peak NOBUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations			  			  			
Volume (veh/h)	0	68	2151	52	174	1956			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90			
Hourly flow rate (vph)	0	80	2390	58	193	2173			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None		None				
Median storage (veh)									
Upstream signal (ft)			1190						
pX, platoon unblocked	0.76	0.76			0.76				
vC, conflicting volume	3530	626			2448				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2737	0			1307				
tC, single (s)	6.9	7.0			4.2				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	90			51				
cM capacity (veh/h)	6	818			394				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	80	683	683	683	399	193	724	724	724
Volume Left	0	0	0	0	0	193	0	0	0
Volume Right	80	0	0	0	58	0	0	0	0
cSH	818	1700	1700	1700	1700	394	1700	1700	1700
Volume to Capacity	0.10	0.40	0.40	0.40	0.23	0.49	0.43	0.43	0.43
Queue Length 95th (ft)	8	0	0	0	0	65	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	22.6	0.0	0.0	0.0
Lane LOS	A					C			
Approach Delay (s)	9.9	0.0				1.8			
Approach LOS	A								
Intersection Summary									
Average Delay			1.1						
Intersection Capacity Utilization			48.3%		ICU Level of Service			A	
Analysis Period (min)			15						

2015 AM Peak BUILD Conditions

Existing Geometry
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HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	0	26	2612	0	14	2344			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.85	0.85	0.96	0.96	0.96	0.96			
Hourly flow rate (vph)	0	31	2721	0	15	2442			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage (veh)									
Upstream signal (ft)			1190						
pX, platoon unblocked	0.57	0.57			0.57				
vC, conflicting volume	3564	907			2721				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2862	0			1386				
tC, single (s)	6.9	7.0			4.2				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	95			95				
cM capacity (veh/h)	7	618			277				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	31	907	907	907	0	15	814	814	814
Volume Left	0	0	0	0	0	15	0	0	0
Volume Right	31	0	0	0	0	0	0	0	0
cSH	618	1700	1700	1700	1700	277	1700	1700	1700
Volume to Capacity	0.05	0.53	0.53	0.53	0.00	0.05	0.48	0.48	0.48
Queue Length 95th (ft)	4	0	0	0	0	4	0	0	0
Control Delay (s)	11.1	0.0	0.0	0.0	0.0	18.7	0.0	0.0	0.0
Lane LOS	B					C			
Approach Delay (s)	11.1	0.0				0.1			
Approach LOS	B								
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization			60.5%			ICU Level of Service			B
Analysis Period (min)			15						

2015 PM Peak NOBUILD Conditions

Existing Geometry
D:\ATOB\PROJECTS\Walmart_Montano_Coors\Synchro\2015PNX.syn

A 76a

HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/22/2011 - Synchro 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	0	180	2620	141	231	2320			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.85	0.85	0.96	0.96	0.96	0.96			
Hourly flow rate (vph)	0	212	2729	147	241	2417			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage (veh)									
Upstream signal (ft)			1190						
pX, platoon unblocked	0.64	0.64			0.64				
vC, conflicting volume	4089	756			2876				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	3026	0			1137				
tC, single (s)	6.9	7.0			4.2				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	70			38				
cM capacity (veh/h)	2	695			388				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	212	780	780	780	537	241	806	806	806
Volume Left	0	0	0	0	0	241	0	0	0
Volume Right	212	0	0	0	147	0	0	0	0
cSH	695	1700	1700	1700	1700	388	1700	1700	1700
Volume to Capacity	0.30	0.46	0.46	0.46	0.32	0.62	0.47	0.47	0.47
Queue Length 95th (ft)	32	0	0	0	0	100	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.0	0.0	28.3	0.0	0.0	0.0
Lane LOS	B					D			
Approach Delay (s)	12.4	0.0				2.6			
Approach LOS	B								
Intersection Summary									
Average Delay			1.6						
Intersection Capacity Utilization			59.8%		ICU Level of Service			B	
Analysis Period (min)			15						

2015 PM Peak BUILD Conditions

Existing Geometry
D:\ATOB\PROJECTS\Walmart_Montano_Coors\Synchro\2015PBX.syn

Traffic Count Data Sheet

Year Counts Taken: **2010** E-W Street **Montano Blvd** Speed Limit (Montano Blvd)= **40** MPH
 N-S Street: **Coors Blvd** Speed Limit (Coors Blvd)= **45** MPH
 Date of Count: **11/16/10**

Begin Time	End Time	Eastbound (Montano Blvd)			Westbound (Montano Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	45	335	85	51	57	27	43	223	178	157	298	2
7:15 AM	7:30 AM	48	305	69	51	28	29	46	237	185	163	348	0
7:30 AM	7:45 AM	56	250	43	57	58	40	64	319	134	163	375	3
7:45 AM	8:00 AM	85	217	103	71	73	52	99	345	125	139	291	6
8:00 AM	8:15 AM	42	168	102	59	125	63	73	225	83	89	225	2
8:15 AM	8:30 AM	35	146	142	37	73	43	42	269	66	44	246	4
8:30 AM	8:45 AM	67	166	124	42	85	30	28	200	64	70	162	2
8:45 AM	9:00 AM	59	124	134	54	74	33	39	285	59	69	226	4
AM Peak Hour Volumes		234	1107	300	230	216	148	252	1124	622	622	1312	11
% of Total Traffic		3.8%	17.9%	4.9%	3.7%	3.5%	2.4%	4.1%	18.2%	10.1%	10.1%	21.2%	0.2%
% Directional			26.6%			9.6%			32.3%			31.5%	
AM Peak Hour Factor			0.88			0.76			0.88			0.90	

Begin Time	End Time	Eastbound (Montano Blvd)			Westbound (Montano Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	49	86	69	72	187	78	58	425	39	56	325	11
4:15 PM	4:30 PM	51	87	74	71	191	84	62	428	46	60	347	10
4:30 PM	4:45 PM	55	82	74	75	195	91	49	430	48	61	375	13
4:45 PM	5:00 PM	62	74	70	99	272	55	127	383	68	70	374	24
5:00 PM	5:15 PM	73	70	86	88	249	24	149	413	65	87	333	11
5:15 PM	5:30 PM	67	68	110	107	279	38	142	406	54	88	390	20
5:30 PM	5:45 PM	60	59	91	84	251	37	149	436	48	69	366	10
5:45 PM	6:00 PM	62	60	85	100	245	34	137	453	42	48	333	14
PM Peak Hour Volumes		262	271	357	378	1051	154	567	1638	235	314	1463	65
% of Total Traffic		3.9%	4.0%	5.3%	5.6%	15.6%	2.3%	8.4%	24.2%	3.5%	4.6%	21.7%	1.0%
% Directional			13.2%			23.4%			36.1%			27.3%	
PM Peak Hour Factor			0.91			0.93			0.96			0.92	

Traffic Count Data Sheet

Year Counts Taken:	2011	Andalucia, Tract 6 Update			Speed Limit (Dellyne Ave.)=	25	MPH
		E-W Street Dellyne Ave. (Learning Rd.)			Speed Limit (Coors Blvd.)=	45	MPH
		N-S Street: Coors Blvd.			Date of Count:		
		SIGNALIZED			10/20/11		

Begin Time	End Time	Eastbound (Dellyne Ave.)			Westbound (Dellyne Ave.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	58	3	74	5	4	0	44	307	2	4	452	3
7:15 AM	7:30 AM	87	3	103	3	1	1	12	346	5	5	554	3
7:30 AM	7:45 AM	78	12	81	13	1	1	12	419	20	21	575	8
7:45 AM	8:00 AM	47	14	51	16	5	6	24	456	39	13	463	6
8:00 AM	8:15 AM	19	1	47	19	1	0	11	394	5	1	485	12
8:15 AM	8:30 AM	27	0	38	4	0	0	44	334	3	0	461	44
8:30 AM	8:45 AM	20	4	35	4	0	4	24	334	2	4	455	44
8:45 AM	9:00 AM	22	0	44	4	0	0	20	362	4	0	464	43
AM Peak Hour Volumes		231	30	282	51	8	8	59	1615	69	40	2077	29
% of Total Traffic		5.1%	0.7%	6.3%	1.1%	0.2%	0.2%	1.3%	35.9%	1.5%	0.9%	46.2%	0.6%
% Directional			12.1%			1.5%			38.7%			47.7%	
AM Peak Hour Factor			0.70			0.62			0.84			0.89	

Begin Time	End Time	Eastbound (Dellyne Ave.)			Westbound (Dellyne Ave.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	48	4	30	4	2	3	74	606	0	2	444	20
4:15 PM	4:30 PM	23	2	24	4	4	0	72	568	4	4	490	23
4:30 PM	4:45 PM	29	4	24	6	4	4	74	590	4	4	483	24
4:45 PM	5:00 PM	30	1	25	9	0	0	70	604	1	2	498	27
5:00 PM	5:15 PM	26	0	20	8	1	2	94	574	6	2	487	40
5:15 PM	5:30 PM	27	5	29	11	2	2	81	592	7	2	506	40
5:30 PM	5:45 PM	26	2	27	9	4	7	92	612	6	1	480	34
5:45 PM	6:00 PM	48	4	28	2	2	2	70	617	2	2	456	34
PM Peak Hour Volumes		109	8	101	37	7	11	337	2382	20	7	1971	141
% of Total Traffic		2.1%	0.2%	2.0%	0.7%	0.1%	0.2%	6.6%	46.4%	0.4%	0.1%	38.4%	2.7%
% Directional			4.2%			1.1%			53.4%			41.3%	
PM Peak Hour Factor			0.89			0.69			0.96			0.97	

Traffic Count Data Sheet

Andalucia, Tract 6 Update

Year Counts Taken: 2011 E-W Street Montano Rd. Speed Limit (Montano Rd.)= 25 MPH
 N-S Street: Winterhaven Speed Limit (Winterhaven)= 25 MPH
 Date of Count: 10/19/11

UNSIGNALIZED

Begin Time	End Time	Eastbound (Montano Rd.)			Westbound (Montano Rd.)			Northbound (Winterhaven)			Southbound (Winterhaven)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	6	467	2	2	42	6	0	0	0	0	0	11
7:15 AM	7:30 AM	3	566	1	6	82	9	0	0	2	0	0	12
7:30 AM	7:45 AM	6	621	1	15	92	16	0	0	8	0	0	5
7:45 AM	8:00 AM	3	484	14	28	122	9	0	0	19	0	0	7
8:00 AM	8:15 AM	15	379	14	24	121	17	0	0	26	0	0	6
8:15 AM	8:30 AM	17	358	4	3	111	18	0	0	5	0	0	6
8:30 AM	8:45 AM	14	367	0	2	124	11	0	0	6	0	0	7
8:45 AM	9:00 AM	16	326	2	4	144	22	0	0	4	0	0	17
AM Peak Hour Volumes		27	2050	30	73	417	51	0	0	55	0	0	29
% of Total Traffic		1.0%	75.0%	1.1%	2.7%	15.3%	1.9%	0.0%	0.0%	2.0%	0.0%	0.0%	1.1%
% Directional			77.1%			19.8%			2.0%			1.1%	
AM Peak Hour Factor			0.84			0.83			0.53			0.60	

Begin Time	End Time	Eastbound (Montano Rd.)			Westbound (Montano Rd.)			Northbound (Winterhaven)			Southbound (Winterhaven)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	11	156	2	11	291	64	0	0	8	0	0	33
4:15 PM	4:30 PM	17	186	4	8	353	77	0	0	8	0	0	29
4:30 PM	4:45 PM	15	221	4	4	292	68	0	0	6	0	0	20
4:45 PM	5:00 PM	13	181	1	5	345	80	0	0	7	0	0	20
5:00 PM	5:15 PM	14	184	2	16	340	72	0	0	9	0	0	21
5:15 PM	5:30 PM	13	187	9	14	347	95	0	0	19	0	0	11
5:30 PM	5:45 PM	17	184	3	11	336	79	0	0	11	0	0	17
5:45 PM	6:00 PM	10	151	4	5	358	89	0	0	5	0	0	14
PM Peak Hour Volumes		57	736	15	46	1368	326	0	0	46	0	0	69
% of Total Traffic		2.1%	27.6%	0.6%	1.7%	51.4%	12.2%	0.0%	0.0%	1.7%	0.0%	0.0%	2.6%
% Directional			30.3%			65.3%			1.7%			2.6%	
PM Peak Hour Factor			0.97			0.95			0.61			0.82	

Traffic Count Data Sheet

Year Counts Taken: 2011 E-W Street Montano Rd Speed Limit (Montano Rd)= 25 MPH
 N-S Street: Fourth St Speed Limit (Fourth St)= 25 MPH
 Date of Count: 10/27/11

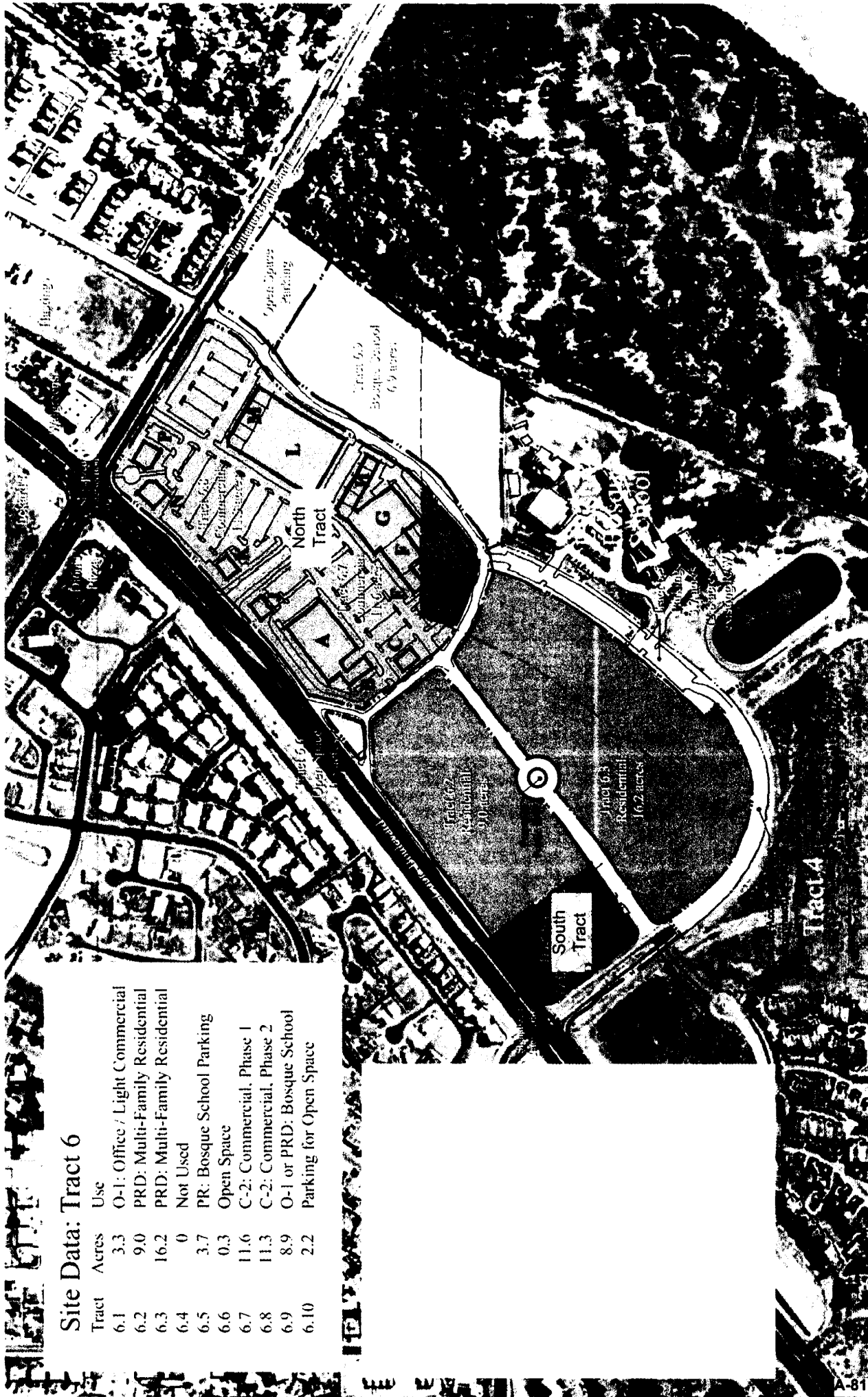
Begin Time	End Time	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	32	322	120	44	39	8	23	52	26	34	84	8
7:15 AM	7:30 AM	28	351	137	26	68	9	40	75	40	41	101	13
7:30 AM	7:45 AM	42	344	118	30	70	17	52	102	50	51	120	38
7:45 AM	8:00 AM	47	291	129	30	122	22	56	122	56	49	133	22
8:00 AM	8:15 AM	31	253	89	35	101	18	46	106	33	54	138	24
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Volumes		148	1239	473	121	361	66	194	405	179	195	492	97
% of Total Traffic		3.7%	31.2%	11.9%	3.0%	9.1%	1.7%	4.9%	10.2%	4.5%	4.9%	12.4%	2.4%
% Directional			46.9%			13.8%			19.6%			19.7%	
AM Peak Hour Factor			0.90			0.79			0.83			0.91	

Begin Time	End Time	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	37	426	66	32	239	45	89	150	26	47	126	48
4:15 PM	4:30 PM	34	147	55	43	340	47	102	121	34	48	137	35
4:30 PM	4:45 PM	31	156	62	45	257	50	108	142	26	38	113	38
4:45 PM	5:00 PM	40	150	61	29	331	59	95	133	26	45	131	41
5:00 PM	5:15 PM	31	139	50	36	290	37	92	143	72	37	115	23
5:15 PM	5:30 PM	34	142	48	36	343	54	135	138	22	45	119	36
5:30 PM	5:45 PM	42	124	44	37	304	45	120	155	30	25	98	46
5:45 PM	6:00 PM	5	49	8	0	0	0	0	0	0	10	24	2
PM Peak Hour Volumes		136	592	228	153	1218	193	397	539	158	168	496	137
% of Total Traffic		3.1%	13.4%	5.2%	3.5%	27.6%	4.4%	9.0%	12.2%	3.6%	3.8%	11.2%	3.1%
% Directional			21.7%			35.4%			24.8%			18.1%	
PM Peak Hour Factor			0.95			0.91			0.89			0.91	

Data from 2005
Approved Plan for
Andalucia, Tract 6

Site Data: Tract 6

Tract	Acres	Use
6.1	3.3	O-1: Office / Light Commercial
6.2	9.0	PRD: Multi-Family Residential
6.3	16.2	PRD: Multi-Family Residential
6.4	0	Not Used
6.5	3.7	PR: Bosque School Parking
6.6	0.3	Open Space
6.7	11.6	C-2: Commercial, Phase 1
6.8	11.3	C-2: Commercial, Phase 2
6.9	8.9	O-1 or PRD: Bosque School
6.10	2.2	Parking for Open Space



turn-in only driveway located approximately midway between Dellyne Ave. and Montano Rd.

The proposed driveway configuration can be seen on two site development plans on Pages A-2 and A-3 in Appendix "A" of this study.

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (7th Edition, 2003). Trips for the development were determined based on land uses defined on the Conceptual Site Development Plan on Pages A-2 and A-3 in the Appendix of this report. The resulting number of trips generated for the proposed development are summarized in the following tables:

Montano Shops (Montano Rd. / Winterhaven Dr.)

Trip Generation Data

USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.		
		ENTER	EXIT	ENTER	EXIT	
DESCRIPTION	GROSS					
Summary Sheet		Units				
Shopping Center (820)	25.00	2,758	42	27	121	131
Automobile Parts Sales (843)	7.00	416	7	7	20	21
Drive-In Bank (912)	4.00	1,563	54	41	127	127
Subtotal		4,737	103	75	268	279

Andalucia Tract 6 - Daskalos Development

Trip Generation Data

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.		
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units					
Bldg. A	Supermarket (850)	44.00	4,337	92	59	249	239
Bldg. B, C, E, H, M	Specialty Retail Center (814)	46.00	2,006	150	191	58	74
Bldg. D	Drive-In Bank (912)	4.00	1,563	54	41	127	127
Bldg. F, G, L	Shopping Center (820)	134.00	8,214	114	73	366	396
Bldg. S	Drive-In Bank (912)	5.00	2,101	67	51	158	158
Bldg. J, K, N, P, Q, R	High Turnover (Sit-Down) Restaurant (832)	38.00	4,953	183	169	248	165
Subtotal Commercial			23,174	660	584	1,206	1,159
Pass-by Trip Adjustment		30%	(6,952)	(198)	(175)	(362)	(348)
Adjusted Commercial Trips			16,222	462	409	844	811
Residential	Apartment, Post-1973 (220)	500.00	3,131	40	211	194	95
Total New Trips			19,353	502	620	1,038	906

Pass-by trip credits were taken for the 2010 analysis but not the 2006 analysis due to the size of the development considered at those levels.

Andalucia Tract 6 - Daskalos Development

Trip Generation Data

COMMENT	USE (ITE CODE)	DESCRIPTION	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	GROSS		ENTER	EXIT	ENTER	EXIT	
Summary Sheet							
		Units					
Bldg. A		44.00	4,337	92	59	249	239
Bldg. B, C, E, H, M		46.00	2,006	150	191	58	74
Bldg. D		4.00	1,563	54	41	127	127
Bldg. F, G, L		134.00	8,214	114	73	366	396
Bldg. S		0.00	-	-	-	-	-
Bldg. J, K, N, P, Q, R		22.00	2,867	106	98	143	96
			18,987	516	462	943	932
Subtotal Commercial							
Pass-by Trip Adjustment			30%	(5,696)	(155)	(139)	(283)
Adjusted Commercial Trips			13,291	361	323	660	652
Residential		Apartment, Post-1973 (220)	500.00	3,131	40	211	194
		Total New Trips	16,422	401	534	854	747

NOTE: Trips from South Tract have been excluded from this Table

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2015) - 100% Development

TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN

INTERSECTION: Summary

Montano Rd / Coors Blvd

(3)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.88			0.76			0.88			0.90			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
237	1,120	304	233	219	150	255	1,137	629	629	1,328	11	
248	1,185	330	245	229	157	282	1,196	659	659	1,398	12	
248	1,242	388	284	229	157	392	1,273	659	677	1,425	12	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.91			0.93			0.96			0.92			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
265	274	361	383	1,064	156	574	1,658	238	318	1,481	66	
278	304	395	402	1,114	163	640	1,748	249	333	1,562	69	
278	409	507	475	1,114	163	850	1,833	249	366	1,636	69	

Dellyne Ave / Coors Blvd

(4)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.75			0.75			0.84			0.89			PHF
Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
231	30	282	51	8	8	59	1,615	69	40	2,077	29	
242	39	296	63	13	18	62	1,693	88	52	2,177	30	
282	39	296	206	49	110	62	1,737	139	95	2,177	30	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.89			0.75			0.96			0.97			PHF
Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
109	8	101	37	7	11	337	2,382	20	7	1,971	141	
114	20	106	66	21	38	353	2,496	44	21	2,066	148	
188	20	106	326	94	79	353	2,590	176	119	2,066	148	

Montano Rd / Fourth St

(7)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.90			0.79			0.83			0.91			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
148	1,239	473	121	361	66	194	405	179	195	492	977	
157	1,298	505	127	378	69	218	424	188	204	516	1,027	
173	1,351	581	127	388	69	292	424	188	204	516	1,044	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.95			0.91			0.89			0.91			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
136	592	228	153	1,218	193	397	539	158	168	496	137	
149	620	264	160	1,276	202	438	565	166	176	520	149	
180	644	399	160	1,325	202	580	565	166	176	520	181	

Montano Rd / Winterhaven Rd

(8)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.85			0.83			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
27	2,050	30	73	417	51	0	0	55	0	0	29	
28	2,154	31	95	437	53	0	0	64	0	0	31	
32	2,158	41	178	455	53	0	0	198	0	0	34	

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.97			0.95			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
57	736	15	46	1,368	326	0	0	46	0	0	69	
61	786	16	75	1,434	342	0	0	63	0	0	73	
67	838	34	312	1,420	342	0	0	200	0	0	80	

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2015) - 100% Development

TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN

INTERSECTION: **Summary**

Montano Rd / Antequera Rd

(9)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.85			0.85			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	2,379	0	0	601	0	0	0	0	0	0	0	0
0	2,492	0	0	630	0	0	0	0	0	0	0	0
0	2,433	134	0	669	0	0	0	77	0	0	0	0

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.95			0.95			0.85			0.85			PHF
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	830	0	0	1,602	0	0	0	0	0	0	0	0
0	869	0	0	1,678	0	0	0	0	0	0	0	0
0	844	163	0	1,751	0	0	0	101	0	0	0	0

E-W Street / Coors Blvd

(10)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.85			0.85			0.90			0.90			PHF
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	2,022	0	0	1,864	0	0
0	0	0	0	0	0	0	2,137	0	0	1,973	0	0
0	0	0	0	0	125	0	2,228	78	0	2,098	0	0

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.85			0.85			0.96			0.96			PHF
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	2,469	0	0	2,224	0	0
0	0	0	0	0	0	0	2,638	0	0	2,359	0	0
0	0	0	0	0	282	0	2,758	164	0	2,618	0	0

Mirandela Rd / Coors Blvd

(11)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.85			0.85			0.88			0.88			PHF
Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	2,022	0	0	1,864	0	0
0	0	0	0	0	10	0	2,128	0	10	1,963	0	0
0	0	0	0	0	113	0	2,156	82	145	1,953	0	0

Existing (2011)

2015 (NO BUILD - P.M.)

2015 (BUILD - P.M.)

0.85			0.85			0.96			0.96			PHF
Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	2,469	0	0	2,224	0	0
0	0	0	0	0	26	0	2,612	0	14	2,344	0	0
0	0	0	0	0	226	0	2,606	186	286	2,330	0	0

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Coors Blvd**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN****INTERSECTION:**E-W Street: **Montano Rd** (3)N-S Street: **Coors Blvd**

Year of Existing Counts 2010

Implementation Year 2015

Growth Rates

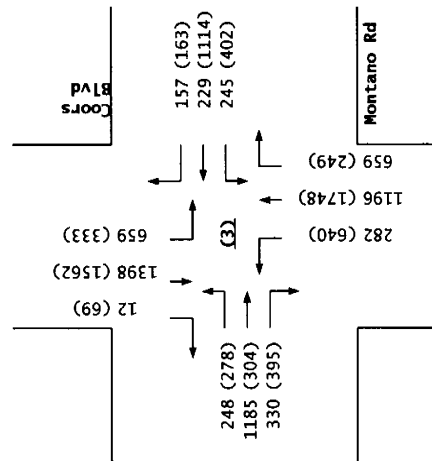
	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	234	1,107	300	230	216	148	252	1,124	622	622	1,312	11
Background Traffic Growth	14	66	18	14	13	9	15	67	37	37	79	1
Subtotal	248	1,173	318	244	229	157	267	1,191	659	659	1,391	12
Credit Union (Leaming) Trips	0	12	12	1	0	0	15	5	0	0	7	0
Subtotal (NO BUILD - A.M.)	248	1,185	330	245	229	157	282	1,196	659	659	1,398	12
Percent Residential Trips Generated(Entering)	0.00%	0.00%	3.38%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.34%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.38%	21.34%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	15.89%	15.90%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	4.95%	5.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.79%	9.95%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	57	58	39	0	0	110	77	0	18	27	0
Total AM Peak Hour BUILD Volumes	248	1,242	388	284	229	157	392	1,273	659	677	1,425	12

AM Adjustment for Heavy EB Flow on Montano

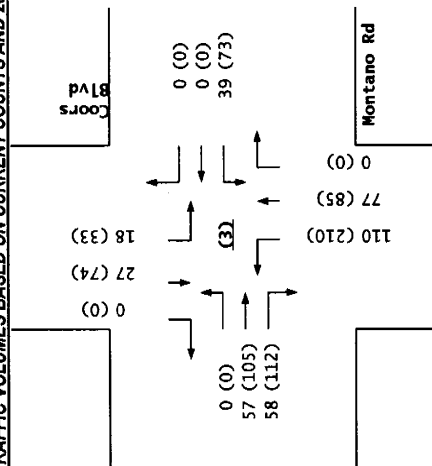
	75											
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65
Background Traffic Growth	16	16	21	23	63	9	34	98	14	19	88	4
Subtotal	278	287	378	401	1,114	163	601	1,736	249	333	1,551	69
Credit Union (Leaming) Trips	0	17	17	1	0	0	39	12	0	0	11	0
Subtotal (NO BUILD - P.M.)	278	304	395	402	1,114	163	640	1,748	249	333	1,562	69
Percent Residential Trips Generated(Entering)	0.00%	0.00%	3.38%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.34%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.38%	21.34%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	15.89%	15.90%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	4.95%	5.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.79%	9.95%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	105	112	73	0	0	210	85	0	33	74	0
Total PM Peak Hour BUILD Volumes	278	409	507	475	1,114	163	850	1,833	249	366	1,636	69

	Entering	Exiting		
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	361	323	A.M.	100% Commercial Development
	660	652	P.M.	

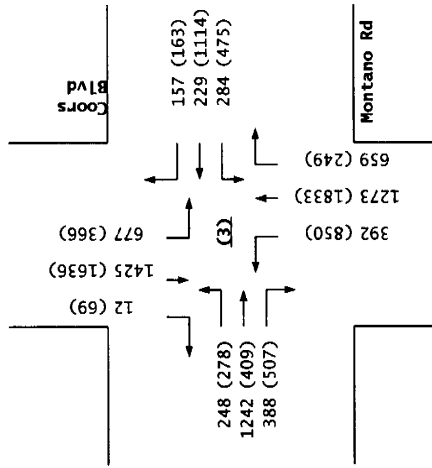
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Dellyne Ave / Coors Blvd**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN****INTERSECTION :**E-W Street: **Dellyne Ave** (4)N-S Street: **Coors Blvd**

Year of Existing Counts 2011

Implementation Year 2015

Growth Rates

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

1.20%			1.20%			1.20%			1.20%		
Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
231	30	282	51	8	8	59	1,615	69	40	2,077	29
11	1	14	2	0	0	3	78	3	2	100	1
242	31	296	53	8	8	62	1,693	72	42	2,177	30
0	8	0	10	5	10	0	0	16	10	0	0
242	39	296	63	13	18	62	1,693	88	52	2,177	30
0.00%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	32.72%	16.71%	0.00%	0.00%
0.00%	0.00%	0.00%	12.36%	0.17%	43.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	10.53%	10.00%	0.00%	0.00%
0.00%	0.00%	0.00%	21.53%	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
40	0	0	96	36	92	0	44	51	43	0	0
282	39	296	206	49	110	62	1,737	139	95	2,177	30

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
109	8	101	37	7	11	337	2,382	20	7	1,971	141
5	0	5	2	0	1	16	114	1	0	95	7
114	8	106	39	7	12	353	2,496	21	7	2,066	148
0	12	0	27	14	26	0	0	23	14	0	0
114	20	106	66	21	38	353	2,496	44	21	2,066	148
0.00%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	32.72%	16.71%	0.00%	0.00%
0.00%	0.00%	0.00%	12.36%	0.17%	43.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	10.53%	10.00%	0.00%	0.00%
0.00%	0.00%	0.00%	21.53%	11.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
74	0	0	152	73	41	0	94	132	98	0	0
188	20	106	326	94	79	353	2,590	176	119	2,066	148

Number of Residential Trips Generated

Entering	Exiting		
35	138	A.M.	100% Residential Development
135	73	P.M.	
361	323	A.M.	100% Commercial Development
660	652	P.M.	

2011 AM Peak Hr. Volumes

2011 PM Peak Hr. Volumes

Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
231	30	282	51	8	8	59	1,615	69	40	2,077	29
109	8	101	37	7	11	337	2,382	20	7	1,971	141

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	27.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	47	0	0	0	0	0	0	0	0
0	0	0	47	0	0	0	0	0	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

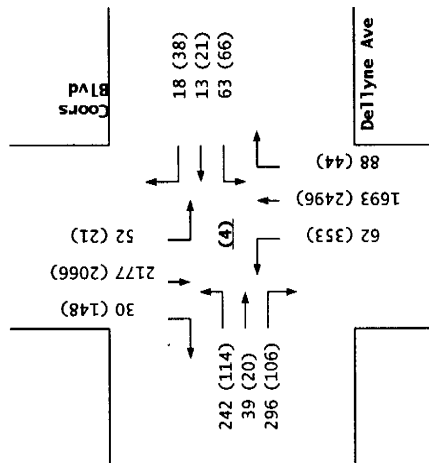
Net PM Passby Trips

Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	31.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	108	0	0	0	0	0	0	0	0
0	0	0	108	0	0	0	0	0	0	0	0

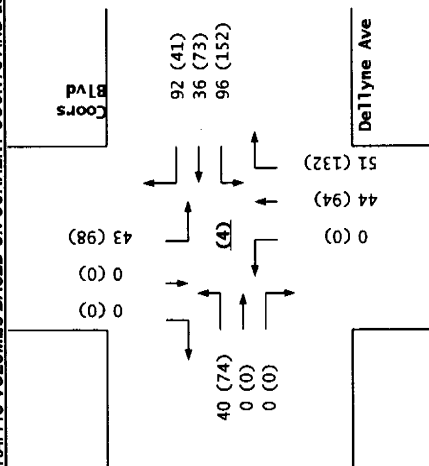
Entering	Exiting	
198	175	AM
362	348	PM

Pass-by Trips

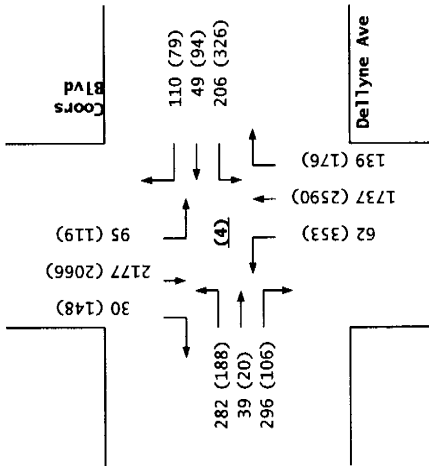
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Fourth St**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN****INTERSECTION :**E-W Street: **Montano Rd** (7)N-S Street: **Fourth St**

Year of Existing Counts 2011

Implementation Year 2015

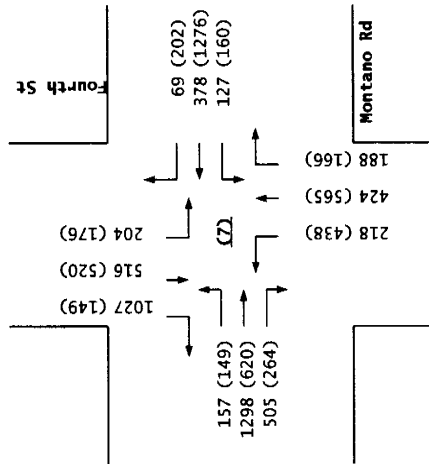
Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	148	1,239	473	121	361	66	194	405	179	195	492	977
Background Traffic Growth	7	59	23	6	17	3	9	19	9	9	24	47
Subtotal	155	1,298	496	127	378	69	203	424	188	204	516	1,024
Credit Union (Learning) Trips	2	0	9	0	0	0	15	0	0	0	0	3
Subtotal (NO BUILD - A.M.)	157	1,298	505	127	378	69	218	424	188	204	516	1,027
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	25.08%	0.00%	5.40%	0.00%	0.00%	0.00%	0.00%	0.67%
Percent Residential Trips Generated(Exiting)	0.67%	25.08%	5.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	4.67%
Percent Commercial Trips Generated(Exiting)	4.67%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	16	53	76	0	10	0	74	0	0	0	0	17
Total AM Peak Hour BUILD Volumes	173	1,351	581	127	388	69	292	424	188	204	516	1,044

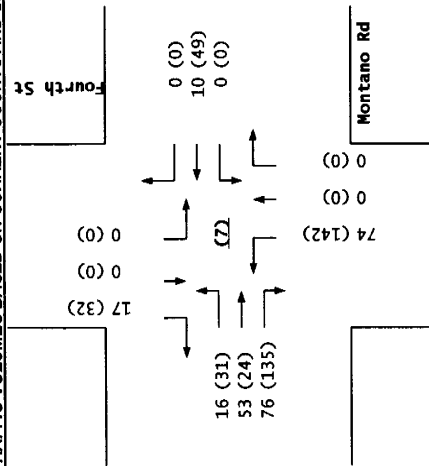
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	136	592	228	153	1,218	193	397	539	158	168	496	137
Background Traffic Growth	7	28	11	7	58	9	19	26	8	8	24	7
Subtotal	143	620	239	160	1,276	202	416	565	166	176	520	144
Credit Union (Learning) Trips	6	0	25	0	0	0	22	0	0	0	0	5
Subtotal (NO BUILD - P.M.)	149	620	264	160	1,276	202	438	565	166	176	520	149
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	25.08%	0.00%	5.40%	0.00%	0.00%	0.00%	0.00%	0.67%
Percent Residential Trips Generated(Exiting)	0.67%	25.08%	5.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	4.67%
Percent Commercial Trips Generated(Exiting)	4.67%	0.00%	19.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	31	24	135	0	49	0	142	0	0	0	0	32
Total PM Peak Hour BUILD Volumes	180	644	399	160	1,325	202	580	565	166	176	520	181

	Entering	Exiting	
Number of Residential Trips Generated	35	138	A.M. 100% Residential Development
	135	73	P.M.
Number of Commercial Trips Generated	361	323	A.M. 100% Commercial Development
	660	652	P.M.

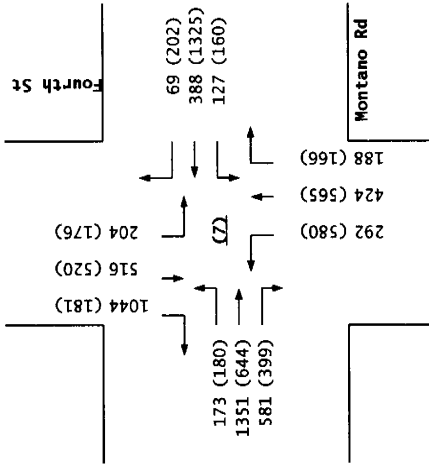
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



Montano Rd / Fourth St

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Winterhaven Rd

TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN

INTERSECTION : E-W Street: **Montano Rd** (8)

N-S Street: **Winterhaven Rd**

Year of Existing Counts 2011

Implementation Year 2015

Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	27	2,050	30	73	417	51	0	0	55	0	0	29
Background Traffic Growth	1	98	1	4	20	2	0	0	3	0	0	1
Subtotal	28	2,148	31	77	437	53	0	0	58	0	0	30
Credit Union (Learning) Trips	0	6	0	18	0	0	0	0	6	0	0	1
Subtotal (NO BUILD - A.M.)	28	2,154	31	95	437	53	0	0	64	0	0	31
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	31.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%
Percent Residential Trips Generated(Exiting)	0.34%	15.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.58%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	14.66%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.93%
Percent Commercial Trips Generated(Exiting)	0.93%	12.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.33%	0.00%	0.00%	0.00%
Total Trips Generated	4	73	0	65	36	0	0	0	73	0	0	3
Subtotal AM Pk Hr. BUILD Volumes	32	2,227	31	160	473	53	0	0	137	0	0	34
Pass-by Trip Adjustments	0	-69	10	18	-18	0	0	0	61	0	0	0
Total AM Peak Hour BUILD Volumes	32	2,158	41	178	455	53	0	0	198	0	0	34

AM Adjustment for Heavy EB Flow on Montano

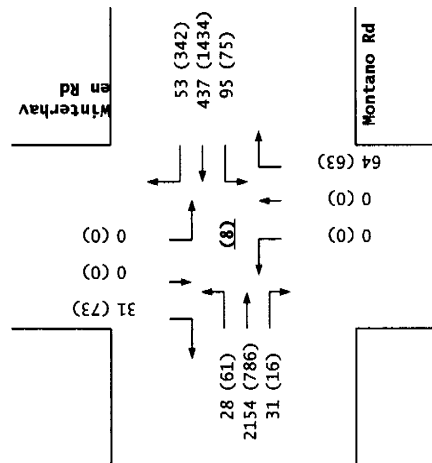
	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	57	736	15	46	1,368	326	0	0	46	0	0	69
Background Traffic Growth	3	35	1	2	66	16	0	0	2	0	0	3
Subtotal	60	771	16	48	1,434	342	0	0	48	0	0	72
Credit Union (Learning) Trips	1	15	0	27	0	0	0	0	15	0	0	1
Subtotal (NO BUILD - P.M.)	61	786	16	75	1,434	342	0	0	63	0	0	73
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	31.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%
Percent Residential Trips Generated(Exiting)	0.34%	15.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.58%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	14.66%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.93%
Percent Commercial Trips Generated(Exiting)	0.93%	12.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.33%	0.00%	0.00%	0.00%
Total Trips Generated	6	95	0	157	66	0	0	0	95	0	0	7
Subtotal PM Pk Hr. BUILD Volumes	67	881	16	232	1,500	342	0	0	158	0	0	80
Pass-by Trip Adjustments	0	-43	18	80	-80	0	0	0	42	0	0	0
Total PM Peak Hour BUILD Volumes	67	838	34	312	1,420	342	0	0	200	0	0	80

Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	361	323	A.M.	100% Commercial Development
	660	652	P.M.	

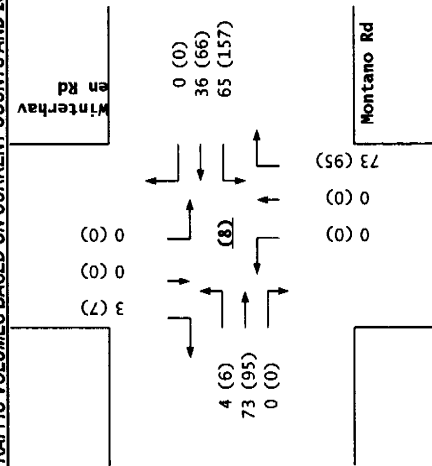
Pass-by Trip Calculations:

	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
AM Pass-by Trips												
Percent Entering	0.00%	-35.00%	5.00%	9.00%	-9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-69	10	18	-18	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	61	0	0	0
Net AM Passby Trips	0	-69	10	18	-18	0	0	0	61	0	0	0
PM Pass-by Trips												
Percent Entering	0.00%	-12.00%	5.00%	22.00%	-22.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-43	18	80	-80	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	42	0	0	0
Net PM Passby Trips	0	-43	18	80	-80	0	0	0	42	0	0	0
Pass-by Trips												
Entering	198											
Exiting		175										
	362											

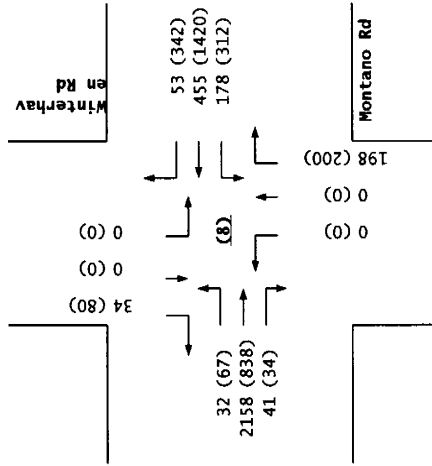
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



Montano Rd / Winterhaven Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Antequera Rd**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN****INTERSECTION :**E-W Street: **Montano Rd**

(9)

N-S Street: **Antequera Rd**

Year of Existing Counts

2010

Implementation Year

2015

Growth Rates

1.20%

1.20%

1.20%

1.20%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

AM Adjustment for Heavy EB Flow on Montano

Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	2,351	0	0	594	0	0	0	0	0	0	0
0	141	0	0	36	0	0	0	0	0	0	0
0	2,492	0	0	630	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.91%	0.00%	0.00%	0.00%
0.00%	0.00%	20.84%	0.00%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.26%	0.00%	0.00%	0.00%
0	0	75	0	39	0	0	0	77	0	0	0
0	2,492	75	0	669	0	0	0	77	0	0	0
0	-59	59	0	0	0	0	0	0	0	0	0
0	2,433	134	0	669	0	0	0	77	0	0	0

75

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	820	0	0	1,583	0	0	0	0	0	0	0
0	49	0	0	95	0	0	0	0	0	0	0
0	869	0	0	1,678	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.91%	0.00%	0.00%	0.00%
0.00%	0.00%	20.84%	0.00%	10.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.26%	0.00%	0.00%	0.00%
0	0	138	0	73	0	0	0	101	0	0	0
0	869	138	0	1,751	0	0	0	101	0	0	0
0	-25	25	0	0	0	0	0	0	0	0	0
0	844	163	0	1,751	0	0	0	101	0	0	0

Number of Residential Trips Generated

Entering 35 Exiting 138 A.M.

Number of Commercial Trips Generated

135 73 P.M.

361 323 A.M.

660 652 P.M.

100% Commercial Development

Pass-by Trip Calculations:**AM Pass-by Trips**

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
0.00%	-30.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-59	59	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0
0	-59	59	0	0	0	0	0	0	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net PM Passby Trips

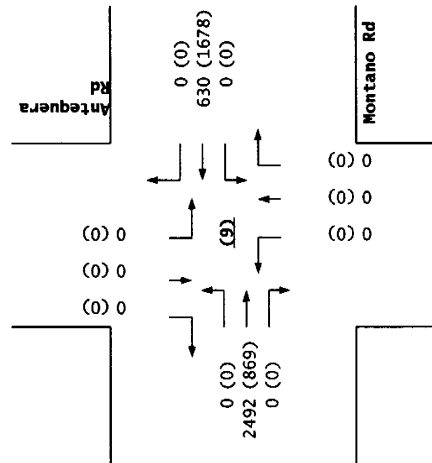
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
0.00%	-7.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-25	25	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0
0	-25	25	0	0	0	0	0	0	0	0	0

Pass-by Trips

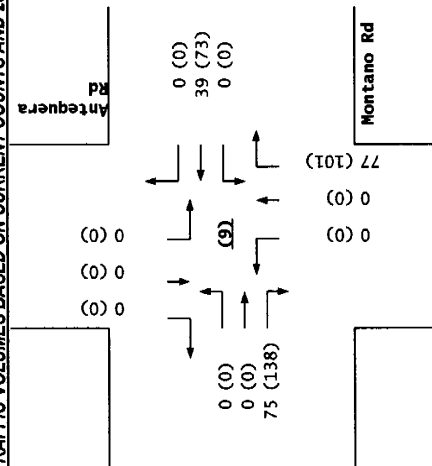
Entering 198 Exiting 175 AM

362 348 PM

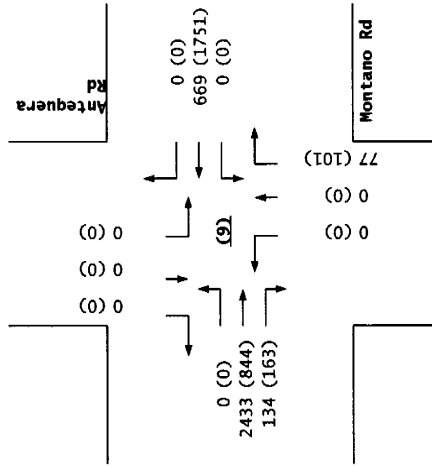
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



Montano Rd / Antequera Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

E-W Street / Coors Blvd**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN****INTERSECTION :**E-W Street: **E-W Street**

(10)

N-S Street: **Coors Blvd**

Year of Existing Counts

2010

Implementation Year

2015

Growth Rates

1.20%

1.20%

1.20%

1.20%

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

AM Adjustment for Heavy EB Flow on Montano

Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	1,998	0	0	1,842	0
0	0	0	0	0	0	0	120	0	0	111	0
0	0	0	0	0	0	0	2,118	0	0	1,953	0
0	0	0	0	0	0	0	19	0	0	20	0
0	0	0	0	0	0	0	2,137	0	0	1,973	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.06%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.72%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	31.83%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	90	0	97	40	0	125	0
0	0	0	0	0	90	0	2,234	40	0	2,098	0
0	0	0	0	0	35	0	-6	38	0	0	0
0	0	0	0	0	125	0	2,228	78	0	2,098	0

75

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Learning) Trips

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	2,440	0	0	2,198	0
0	0	0	0	0	0	0	146	0	0	132	0
0	0	0	0	0	0	0	2,586	0	0	2,330	0
0	0	0	0	0	0	0	52	0	0	29	0
0	0	0	0	0	0	0	2,638	0	0	2,359	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.06%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.72%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	31.83%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	27.82%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	181	0	114	73	0	259	0
0	0	0	0	0	181	0	2,752	73	0	2,618	0
0	0	0	0	0	101	0	6	91	0	0	0
0	0	0	0	0	282	0	2,758	164	0	2,618	0

Number of Residential Trips Generated

Entering	Exiting	
35	138	A.M.
135	73	P.M.

Number of Commercial Trips Generated

361	323	A.M.
660	652	P.M.

100% Commercial Development

Pass-by Trip Calculations:**AM Pass-by Trips**

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	-38	38	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	35	0	32	0	0	0	0
0	0	0	0	0	35	0	-6	38	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

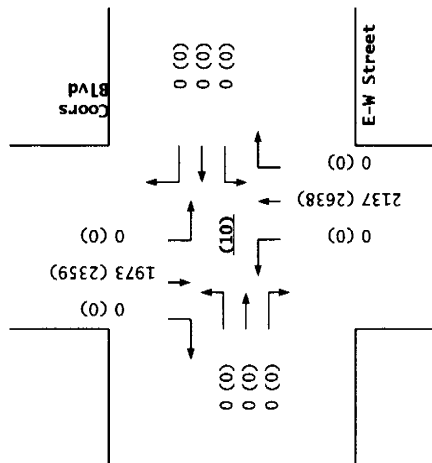
Net PM Passby Trips

Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	-91	91	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	29.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	101	0	97	0	0	0	0
0	0	0	0	0	101	0	6	91	0	0	0

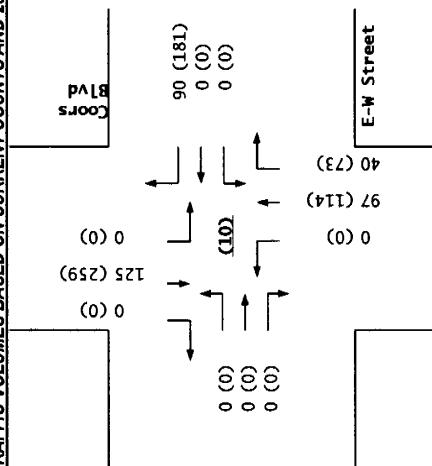
Entering	Exiting	
198	175	AM
362	348	PM

Pass-by Trips

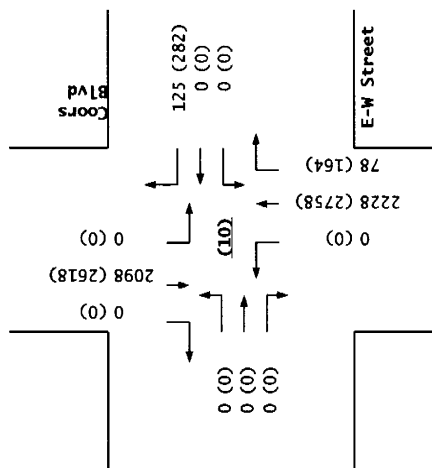
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD



E-W Street / Coors Blvd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Mirandela Rd / Coors Blvd**TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN**INTERSECTION: E-W Street: **Mirandela Rd**

(11)

N-S Street: **Coors Blvd**

Year of Existing Counts 2010

Implementation Year 2015

Growth Rates

	1.20%			1.20%			1.20%			1.20%		
	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	1,998	0	0	1,842	0
Background Traffic Growth	0	0	0	0	0	0	0	120	0	0	111	0
Subtotal	0	0	0	0	0	0	0	2,118	0	0	1,953	0
Credit Union (Learning) Trips	0	0	0	0	0	10	0	10	0	10	10	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	10	0	2,128	0	10	1,963	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	8.35%	16.71%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	12.36%	0.00%	12.36%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	11.15%	21.83%	10.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	71	0	66	44	82	43	0
Subtotal AM Pk Hr. BUILD Volumes	0	0	0	0	0	81	0	2,194	44	92	2,006	0
Pass-by Trip Adjustments	0	0	0	0	0	32	0	-38	38	53	-53	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	113	0	2,156	82	145	1,953	0

AM Adjustment for Heavy EB Flow on Montano

75

	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	2,440	0	0	2,198	0
Background Traffic Growth	0	0	0	0	0	0	0	146	0	0	132	0
Subtotal	0	0	0	0	0	0	0	2,586	0	0	2,330	0
Credit Union (Learning) Trips	0	0	0	0	0	26	0	26	0	14	14	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	26	0	2,612	0	14	2,344	0
Percent Residential Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.90%	8.35%	16.71%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	12.36%	0.00%	12.36%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.00%	11.15%	21.83%	10.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	13.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	103	0	85	95	160	98	0
Subtotal PM Pk Hr. BUILD Volumes	0	0	0	0	0	129	0	2,697	95	174	2,442	0
Pass-by Trip Adjustments	0	0	0	0	0	97	0	-91	91	112	-112	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	226	0	2,606	186	286	2,330	0

Number of Residential Trips Generated	Entering 35	Exiting 138	A.M.
	135	73	P.M.
Number of Commercial Trips Generated	361	323	A.M.
	660	652	P.M.

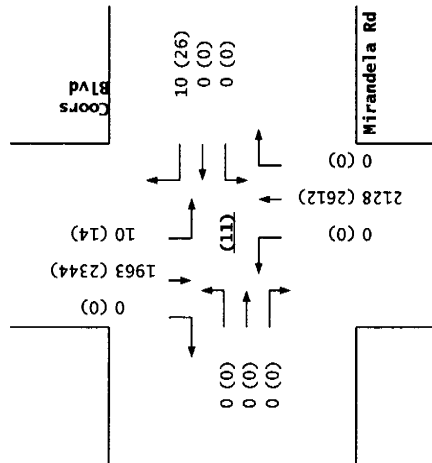
100% Commercial Development

	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2011 AM Peak Hr. Volumes	0	0	0	0	0	0	0	2,022	0	0	1,864	0
2011 PM Peak Hr. Volumes	0	0	0	0	0	0	0	2,469	0	0	2,224	0

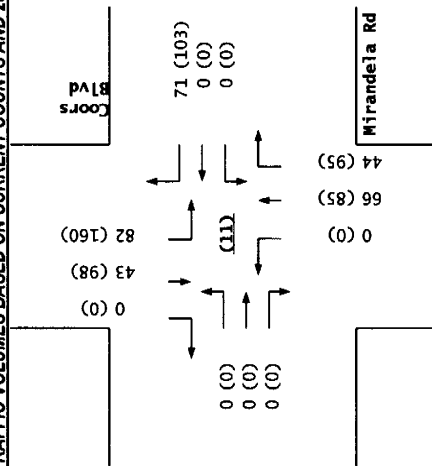
Pass-by Trip Calculations:

	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
AM Pass-by Trips												
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	27.00%	-27.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	-38	38	53	-53	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	32	0	0	0	0	0	0
Net AM Passby Trips	0	0	0	0	0	32	0	-38	38	53	-53	0
PM Pass-by Trips												
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	31.00%	-31.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	-91	91	112	-112	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	97	0	0	0	0	0	0
Net PM Passby Trips	0	0	0	0	0	97	0	-91	91	112	-112	0
Pass-by Trips	Entering 198	Exiting 362	175 AM 348 PM									

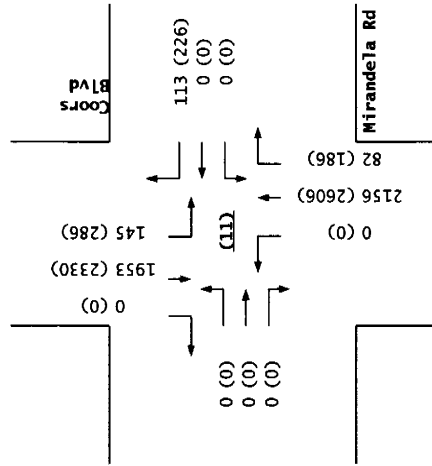
2015
NO BUILD



Trips
TRAFFIC VOLUMES BASED ON CURRENT COUNTS AND 2005 PLAN



2015
BUILD

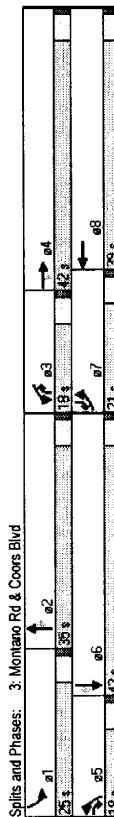


Mirandela Rd / Coors Blvd

Timings 3: Montano Rd & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1242	388	359	229	392	1273	859	677	1425	12
Turn Type	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Detector Phase	7	4	5	3	8	5	2	3	1	6	7
Switch Phase	7	4	5	3	8	5	2	3	1	6	7
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	10.0	21.0	10.0	10.0
Total Split (s)	21.0	42.0	18.0	18.0	39.0	18.0	35.0	18.0	25.0	42.0	21.0
Total Split (%)	17.5%	35.0%	15.0%	15.0%	32.5%	15.0%	29.2%	15.0%	20.6%	35.0%	17.5%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	14.4	37.0	55.0	13.0	35.6	13.0	30.0	43.0	20.0	37.0	51.4
Actuated g/c Ratio	0.12	0.31	0.46	0.11	0.30	0.11	0.25	0.40	0.17	0.31	0.47
v/c Ratio	0.69	1.31	0.61	1.28	0.47	1.21	1.15	0.68	1.33	1.02	0.02
Control Delay	59.9	179.3	29.0	189.3	26.1	168.7	107.5	19.1	198.3	69.0	7.4
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	59.9	179.3	29.0	189.3	26.1	168.7	107.5	19.1	198.3	69.0	7.4
LOS	E	F	C	F	C	F	F	B	F	E	A
Approach Delay	132.4			104.7			92.7			110.1	
Approach LOS	F			F			F			F	
Intersection Summary											
Cycle Length: 120											
Offset 61 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green											
Natural Cycle: 130											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.33											
Intersection Signal Delay: 109.7											
Intersection Capacity Utilization: 105.2%											
Analysis Period (min): 15											



2015 AM Peak BUILD Conditions
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2005 Approved Plan

HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd

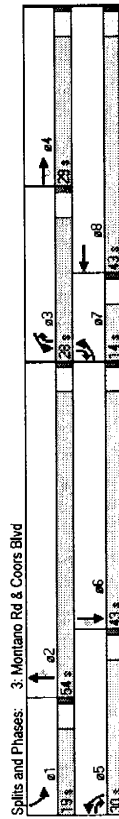
Terry O. Brown, P.E.
11/22/2011 - Synchros 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	248	1242	388	359	229	392	1273	859	677	1425	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.97	0.91	0.88	0.97	0.91	1.00
Flt Protected	1.00	1.00	0.95	1.00	0.94	1.00	1.00	0.85	1.00	1.00	0.85
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Satd. Flow (perm)	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Peak-hour factor, P/H	0.88	0.88	0.88	0.76	0.76	0.76	0.88	0.88	0.88	0.90	0.90
Adj. Flow (vph)	282	1411	441	472	301	207	445	1447	749	752	1583
RTOR Reduction (vph)	0	0	1	0	101	0	0	0	0	0	0
Lane Group Flow (vph)	282	1411	440	472	407	0	445	1447	747	752	1583
Turn Type	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	14.4	37.0	50.0	13.0	35.6	13.0	30.0	43.0	20.0	37.0	51.4
Effective Green, g (s)	14.4	37.0	50.0	13.0	35.6	13.0	30.0	43.0	20.0	37.0	51.4
Actuated g/c Ratio	0.12	0.31	0.42	0.11	0.30	0.11	0.25	0.36	0.17	0.31	0.43
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	408	1081	719	388	976	388	1259	1104	567	1553	737
v/c Ratio Prot	0.06	0.40	0.07	0.14	0.12	0.13	0.29	0.07	0.22	0.31	0.09
v/c Ratio Perm	0.69	1.31	0.61	1.28	0.42	1.21	1.15	0.68	1.33	1.02	0.01
Uniform Delay, d1	50.7	41.5	27.4	53.5	33.9	53.5	45.0	32.6	50.0	41.5	19.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.56	1.00	1.00	1.00
Incremental Delay, d2	5.0	14.2	1.6	146.5	0.3	110.6	74.0	1.1	158.8	27.8	0.0
Delay (s)	55.7	185.7	29.0	200.0	34.2	183.8	109.2	19.4	208.8	69.3	19.7
Level of Service	E	F	C	F	C	F	F	B	F	E	B
Approach Delay (s)	138.1			114.0			96.3			113.7	
Approach LOS	F			F			F			F	
Intersection Summary											
HCM Average Control Delay	114.0										
HCM Volume to Capacity ratio	1.20										
Actuated Cycle Length (s)	120.0										
Intersection Capacity Utilization	105.2%										
Analysis Period (min)	15										
e Critical Lane Group											

2015 AM Peak BUILD Conditions
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2005 Approved Plan

Timings 3: Montano Rd & Coors Blvd Terry O. Brown, P.E. 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	278	409	507	475	1114	850	1833	249	368	1636	69
Turn Type	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Switch Phase	7	4	5	3	8	5	2	3	1	6	7
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Total Split (s)	14.0	29.0	30.0	28.0	43.0	30.0	54.0	28.0	19.0	43.0	14.0
Total Split (%)	10.8%	22.3%	23.1%	21.5%	33.1%	21.5%	41.5%	21.5%	14.6%	33.1%	10.8%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	9.0	24.7	54.7	22.3	38.0	25.0	48.0	76.3	14.0	38.0	52.0
Actuated g/C Ratio	0.07	0.19	0.42	0.17	0.29	0.19	0.38	0.69	0.11	0.29	0.40
vic Ratio	1.30	0.67	0.84	0.88	1.36	1.35	1.01	0.16	1.09	1.21	0.12
Control Delay	208.1	54.9	46.5	51.3	199.4	204.0	47.9	7.8	125.8	140.2	24.3
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	208.1	54.9	46.5	51.3	199.4	204.0	47.9	7.8	125.8	140.2	24.3
LOS	F	D	D	D	F	F	D	A	F	F	C
Approach Delay	87.0			159.3			89.8		133.8		F
Approach LOS	F			F			F		F		F
Intersection Summary											
Cycle Length: 130											
Actuated Cycle Length: 130											
Offset: 74 (57%), Referenced to phase 2:NBT and 6:SBT Start of Green											
Natural Cycle: 130											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.36											
Intersection Signal Delay: 116.4											
Intersection Capacity Utilization 116.4%											
Analysis Period (min) 15											



2015 PM Peak BUILD Conditions

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2005 Approved Plan

HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd Terry O. Brown, P.E. 11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	278	409	507	475	1114	850	1833	249	368	1636	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.97	0.91	0.88	0.97	0.91	1.00
Flt Protected	1.00	1.00	0.85	1.00	0.88	1.00	1.00	0.85	1.00	1.00	0.85
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3438	3400	5036	2760	3400	5036	1568
Satd. Flow (perm)	3400	3505	1568	3400	3438	3400	5036	2760	3400	5036	1568
Peak-hour factor, PHF	0.91	0.91	0.91	0.93	0.93	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	305	449	557	511	1198	175	885	1909	398	1778	75
RTOR Reduction (vph)	0	0	4	0	8	0	0	0	23	0	2
Lane Group Flow (vph)	305	449	553	511	1365	0	885	1909	236	398	1778
Turn Type	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	Prot	pm-ov	pm-ov
Protected Phases	7	4	5	3	8	5	2	3	1	6	7
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	9.0	24.7	49.7	22.3	38.0	25.0	48.0	71.3	14.0	38.0	47.0
Effective Green, g (s)	9.0	24.7	49.7	22.3	38.0	25.0	48.0	71.3	14.0	38.0	47.0
Actuated g/C Ratio	0.07	0.19	0.38	0.17	0.29	0.19	0.38	0.69	0.11	0.29	0.36
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	235	566	680	583	1005	654	1898	1820	366	1472	627
vis Ratio Prot	0.09	0.13	0.16	0.15	0.40	0.26	0.38	0.03	0.12	0.35	0.04
vis Ratio Perm	1.30	0.67	0.84	0.88	1.36	1.35	1.01	0.15	1.09	1.21	0.12
Uniform Delay, d1	60.5	48.9	36.5	52.5	46.0	52.5	40.5	14.4	58.0	46.0	27.7
Progression Factor	1.00	1.00	1.00	0.78	0.98	0.92	0.71	0.80	1.00	1.00	1.00
Incremental Delay, d2	161.7	2.7	9.1	8.2	164.6	165.9	18.6	0.0	72.5	100.2	0.1
Delay (s)	222.2	51.6	45.6	48.0	209.8	214.4	47.2	11.5	130.5	146.2	27.7
Level of Service	F	D	D	D	F	F	D	B	F	F	C
Approach Delay (s)	88.7			166.2			92.7		139.5		F
Approach LOS	F			F			F		F		F
Intersection Summary											
HCM Average Control Delay											
HCM Volume to Capacity ratio											
Actuated Cycle Length (s)											
Intersection Capacity Utilization											
Analysis Period (min)											
Critical Lane Group											

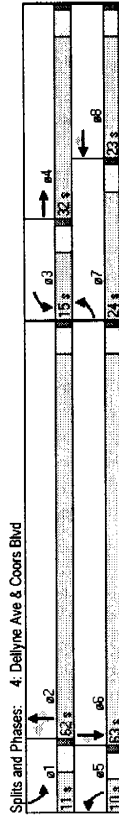
2015 PM Peak BUILD Conditions

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2005 Approved Plan

Timings 4: Delyne Ave & Coors Blvd Terry O. Brown, P.E. 11/22/2011 - Synchros 7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	282	39	206	49	110	62	1737	139	95
Volume (vph)	282	39	206	49	110	62	1737	139	95
Turn Type	Prot	Prot	Perm	pm-pt	Perm	pm-pt	Prot	Perm	Perm
Protected Phases	7	4	3	8	8	5	2	2	6
Permitted Phases	7	4	3	8	8	5	2	2	6
Detector Phase	7	4	3	8	8	5	2	2	6
Switch Phase	7	4	3	8	8	5	2	2	6
Minimum Initial (s)	5.0	5.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	24.0	32.0	16.0	23.0	23.0	10.0	62.0	82.0	11.0
Total Split (%)	20.0%	26.7%	12.5%	19.2%	19.2%	8.3%	51.7%	51.7%	9.2%
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	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	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	17.3	27.0	10.0	19.7	19.7	62.0	57.0	57.0	58.0
Actuated g/C Ratio	0.14	0.22	0.08	0.16	0.16	0.52	0.48	0.48	0.48
v/c Ratio	0.77	1.06	0.97	0.21	0.45	0.55	0.86	0.20	0.63
Control Delay	60.2	99.1	101.8	46.7	26.3	30.2	32.9	6.0	90.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.2	99.1	101.8	46.7	26.3	30.2	32.9	6.0	90.0
LOS	E	F	F	D	C	C	C	A	E
Approach Delay	81.4	71.7						32.7	
Approach LOS	F	E						C	
Intersection Summary									
Cycle Length: 120									
Actuated Cycle Length: 120									
Offset 0 (0%): Referenced to phase 2:NBL and 6:SBT, Start of Green									
Natural Cycle: 130									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 1.06									
Intersection Signal Delay: 41.5									
Intersection Capacity Utilization 88.1%									
Analysis Period (min) 15									



2015 AM Peak BUILD Conditions

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HCM Signalized Intersection Capacity Analysis 4: Delyne Ave & Coors Blvd Terry O. Brown, P.E. 11/22/2011 - Synchros 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	282	39	206	49	110	62	1737	139	95
Volume (vph)	282	39	206	49	110	62	1737	139	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00	0.91	0.97	0.91
Flt Protected	1.00	0.87	1.00	1.00	0.85	1.00	1.00	0.85	1.00
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (vph)	3400	1900	3400	1845	1568	1752	5036	1568	3400
Satd. Flow (vphpl)	3400	1900	3400	1845	1568	1752	5036	1568	3400
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.84	0.84	0.84	0.89
Adj. Flow (vph)	376	52	395	275	65	147	74	2068	165
RTOR Reduction (vph)	0	60	0	0	0	69	0	65	0
Lane Group Flow (vph)	376	387	0	275	65	76	74	2068	100
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Perm	Prot
Protected Phases	7	4	3	8	8	5	2	2	6
Permitted Phases	7	4	3	8	8	5	2	2	6
Actuated Green, G (s)	17.3	27.0	10.0	19.7	19.7	62.0	57.0	57.0	58.0
Effective Green, g (s)	17.3	27.0	10.0	19.7	19.7	62.0	57.0	57.0	58.0
Actuated g/C Ratio	0.14	0.22	0.08	0.16	0.16	0.52	0.48	0.48	0.48
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	490	360	283	303	257	134	2392	745	170
v/s Ratio Prot	0.11	0.24	0.08	0.04	0.02	0.41	0.03	0.03	0.03
v/c Ratio	0.77	1.07	0.97	0.21	0.31	0.55	0.86	0.13	0.83
Uniform Delay, d1	49.4	46.5	54.9	43.4	44.1	26.8	28.1	17.7	55.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.1	68.5	45.5	0.4	0.7	4.9	4.5	0.4	3.8
Delay (s)	56.5	115.0	100.3	43.8	44.8	31.7	32.5	18.0	74.7
Level of Service	E	F	F	D	D	C	C	B	E
Approach Delay (s)	88.3								
Approach LOS	F								
Intersection Summary									
HCM Average Control Delay	42.4								
HCM Volume to Capacity ratio	0.96								
Actuated Cycle Length (s)	120.0								
Intersection Capacity Utilization	88.1%								
Analysis Period (min)	15								
c Critical Lane Group									

2015 AM Peak BUILD Conditions

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Timings
4: Dellyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	188	20	326	94	79	353	2590	176	119
Volume (vph)	188	20	326	94	79	353	2590	176	119
Turn Type	Prot	Prot	Perm	pm-pt	Perm	Prot	Perm	Prot	Perm
Protected Phases	7	4	3	8	5	2	2	1	6
Permitted Phases	7	4	3	8	5	2	2	1	6
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	18.0	21.0	21.0	24.0	26.0	78.0	78.0	10.0	62.0
Total Split (%)	13.8%	16.2%	16.2%	18.5%	20.0%	60.0%	7.7%	47.7%	47.7%
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
All-Red Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.1	10.7	16.0	14.6	88.3	74.9	74.9	8.4	57.0
Actuated g/C Ratio	0.08	0.08	0.12	0.11	0.11	0.08	0.08	0.06	0.44
vic Ratio	0.67	0.58	1.04	0.60	0.43	0.89	0.93	0.19	0.56
Control Delay	67.6	23.6	109.6	66.9	24.5	62.4	32.7	57.9	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	23.6	109.6	66.9	24.5	62.4	32.7	57.9	21.3
LOS	E	C	F	E	C	E	C	A	C
Approach Delay	E	D	F	F	F	F	F	C	C
Approach LOS	D	D	F	F	F	F	F	C	C
Intersection Summary									
Cycle Length: 130									
Offset: 115 (88%), Referenced to phase 2:NBT, and 6:SBT, Start of Green									
Natural Cycle: 130									
Control Type: Actuated-Coordinated									
Maximum Vic Ratio: 1.04									
Intersection Signal Delay: 36.2									
Intersection Capacity Utilization 93.0%									
Analysis Period (min) 15									

Splits and Phases: 4: Dellyne Ave & Coors Blvd



HCM Signalized Intersection Capacity Analysis
4: Dellyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	188	20	326	94	79	353	2590	176	119
Volume (vph)	188	20	326	94	79	353	2590	176	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util Factor	0.97	1.00	0.97	1.00	1.00	0.91	1.00	0.97	0.91
Flt Protected	1.00	0.97	1.00	1.00	1.00	0.85	1.00	0.85	1.00
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3400	1611	3400	1845	1568	1752	5036	1568	3400
Satd. Flow (perm)	3400	1611	3400	1845	1568	119	5036	1568	3400
Peak-hour factor, P.H.F.	0.89	0.89	0.89	0.75	0.75	0.96	0.96	0.96	0.97
Adj. Flow (vph)	211	22	119	435	125	105	368	2698	183
RTOR Reduction (vph)	0	109	0	0	0	66	0	50	0
Lane Group Flow (vph)	211	32	0	435	125	39	368	2698	133
Turn Type	Prot	Prot	Prot	Perm	pm-pt	Perm	Prot	Prot	Perm
Protected Phases	7	4	3	8	5	2	2	1	6
Permitted Phases	7	4	3	8	5	2	2	1	6
Actuated Green, G (s)	12.1	10.7	16.0	14.6	88.3	74.9	74.9	8.4	57.0
Effective Green, g (s)	12.1	10.7	16.0	14.6	88.3	74.9	74.9	8.4	57.0
Actuated g/C Ratio	0.09	0.08	0.12	0.11	0.11	0.08	0.08	0.06	0.44
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	316	133	418	207	176	411	2902	903	220
vic Ratio Prot	0.06	0.02	0.13	0.07	0.18	0.04	0.04	0.42	0.06
vic Ratio Perm	0.67	0.24	1.04	0.60	0.22	0.90	0.93	0.15	0.56
Uniform Delay, d1	57.0	55.8	57.0	54.9	52.5	41.6	25.1	12.8	59.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Incremental Delay, d2	5.3	0.9	55.0	4.9	0.6	21.3	6.8	0.3	1.8
Delay (s)	62.3	56.8	112.0	59.8	53.2	62.9	31.9	13.1	60.8
Level of Service	E	E	F	E	D	E	C	B	C
Approach Delay (s)	E	E	F	F	F	F	F	C	C
Approach LOS	E	E	F	F	F	F	F	C	C
Intersection Summary									
HCM Average Control Delay									
HCM Volume to Capacity ratio									
Actuated Cycle Length (s)									
Intersection Capacity Utilization									
Analysis Period (min)									
Critical Lane Group									

2015 PM Peak BUILD Conditions
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2015 PM Peak BUILD Conditions
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Timings 7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	173	1351	581	127	368	89	292	424	188	204	516
Volume (vph)	pm-pt	7	4	5	3	8	1	5	2	3	1
Turn Type	pm-pt	7	4	5	3	8	1	5	2	3	1
Permitted Phases	4	4	4	8	8	2	2	2	6	6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	8
Switch Phase	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Initial (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0
Minimum Split (s)	18.0	50.0	13.0	10.0	42.0	20.0	13.0	50.0	10.0	20.0	57.0
Total Split (s)	13.8%	38.5%	10.0%	7.7%	32.3%	15.4%	10.0%	38.5%	7.7%	15.4%	43.8%
Yellow Time (s)	4.0	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	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	Max
Recall Mode	55.0	45.0	58.0	42.7	37.7	56.4	54.3	46.3	56.3	64.5	52.0
Act Effect Green (s)	0.42	0.35	0.45	0.33	0.29	0.43	0.42	0.35	0.43	0.50	0.40
Actuated g/C Ratio	0.55	1.24	0.82	1.30	0.48	0.12	1.10	0.41	0.32	0.53	1.480r
v/c Ratio	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
Queue Length	C	F	C	F	C	F	A	F	C	B	C
Total Delay	108.7	F	72.8	E	55.0	D	122.5	F			
LOS	F										
Approach Delay											
Approach LOS											
Intersection Summary											
Cycle Length: 130											
Actuated Cycle Length: 130											
Natural Cycle: 130											
Control Type: Semi Act-Uncoordinated											
Maximum v/c Ratio: 1.30											
Intersection Signal Delay: 99.2											
Intersection LOS: F											
ICU Level of Service: H											
Intersection Capacity Utilization 117.3%											
Analysis Period (min): 15											
Dr Defacto Right Lane: Recode with 1 though lane as a right lane.											
Spills and Phases: 7: Montano Rd & Fourth St											
a1	20 s	a2	50 s	a3	50 s	a4	50 s	a5	50 s	a6	50 s
a7	13 s	a8	13 s	a9	13 s	a10	13 s	a11	13 s	a12	13 s

2015 AM Peak BUILD Conditions
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HCM Signalized Intersection Capacity Analysis 7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Configurations	173	1351	581	127	368	89	292	424	188	204
Volume (vph)	pm-pt	7	4	5	3	8	1	5	2	3
Turn Type	pm-pt	7	4	5	3	8	1	5	2	3
Permitted Phases	4	4	4	8	8	2	2	2	6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1
Switch Phase	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Initial (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0
Minimum Split (s)	18.0	60.0	13.0	10.0	42.0	20.0	13.0	60.0	10.0	20.0
Total Split (s)	13.8%	38.5%	10.0%	7.7%	32.3%	15.4%	10.0%	38.5%	7.7%	15.4%
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	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead/Lag Optimize?	None	None	None	None	None	None	None	None	None	None
Recall Mode	55.0	45.0	58.0	42.7	37.7	56.4	54.3	46.3	56.3	64.5
Act Effect Green (s)	0.42	0.35	0.45	0.33	0.29	0.43	0.42	0.35	0.43	0.50
Actuated g/C Ratio	0.55	1.24	0.82	1.30	0.48	0.12	1.10	0.41	0.32	0.53
v/c Ratio	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Length	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6
Total Delay	C	F	C	F	C	F	A	F	C	B
LOS	C	F	C	F	C	F	A	F	C	B
Approach Delay	108.7	F	72.8	E	55.0	D	122.5	F		
Approach LOS	F									
Intersection Summary										
HCM Average Control Delay	107.6									
HCM Volume to Capacity ratio	1.23									
Actuated Cycle Length (s)	130.0									
Intersection Capacity Utilization	117.3%									
Analysis Period (min)	15									
Dr Defacto Right Lane: Recode with 1 though lane as a right lane.										
c Critical Lane Group										

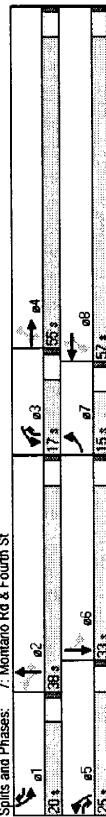
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2005 Approved Plan

Timings 7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	180	644	389	180	1325	202	580	585	186	178	520	181
Volume (vph)	180	644	389	180	1325	202	580	585	186	178	520	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	6
Permitted Phases	4	4	4	8	8	2	2	2	2	2	6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	6
Switch Phase	7	4	5	3	8	1	5	2	3	1	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0
Total Split (s)	15.0	55.0	25.0	17.0	57.0	20.0	25.0	38.0	17.0	20.0	33.0	33.0
Total Split (%)	11.5%	42.3%	19.2%	13.1%	43.6%	15.4%	19.2%	23.2%	13.1%	15.4%	25.4%	25.4%
Yellow Time (s)	4.0	4.0	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	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	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	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Eff Green (s)	60.9	50.9	75.9	63.1	52.0	70.6	53.0	34.4	50.5	41.6	28.0	28.0
Act Eff Green Ratio	0.47	0.39	0.58	0.40	0.40	0.54	0.41	0.28	0.38	0.32	0.22	0.22
v/c Ratio	0.98	0.49	0.44	0.50	1.04	0.25	1.03	0.68	0.27	0.67	1.02	1.02
Control Delay	82.7	32.7	22.3	22.3	72.9	12.0	80.1	47.7	8.8	38.9	86.7	86.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.7	32.7	22.3	22.3	72.9	12.0	80.1	47.7	8.8	38.9	86.7	86.7
LOS	F	C	C	C	E	B	F	D	A	D	F	F
Approach Delay	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
Approach LOS	D	D	D	D	D	D	D	D	D	D	D	D
Intersection Summary	Intersection LOS: E											
Cycle Length: 130	Intersection LOS: E											
Actuated Cycle Length: 130	Intersection LOS: E											
Offset 14 (11%), Referenced to phase 2 NBT and 6 SBT, Start of Green	Intersection LOS: E											
Natural Cycle: 100	Intersection LOS: E											
Control Type: Actuated-Coordinated	Intersection LOS: E											
Maximum v/c Ratio: 1.04	Intersection LOS: E											
Intersection Signal Delay: 57.1	Intersection LOS: E											
Intersection Capacity Utilization 100.0%	Intersection LOS: E											
Analysis Period (min) 15	Intersection LOS: E											

Splits and Phases: 7: Montano Rd & Fourth St



HCM Signalized Intersection Capacity Analysis 7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	180	644	389	180	1325	202	580	585	186	178	520	181
Volume (vph)	180	644	389	180	1325	202	580	585	186	178	520	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.85	1.00	0.95
Fit Protected	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	0.98
Fit Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3369	1752
Satd. Flow (perm)	145	3505	1568	508	3505	1568	434	3505	1568	476	3369	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.89	0.89	0.89	0.89	0.91	0.91
Adj. Flow (vph)	189	678	420	176	1456	222	652	635	187	193	571	189
RTOR Reduction (vph)	0	0	54	0	0	28	0	0	92	0	27	0
Lane Group Flow (vph)	189	678	366	176	1456	194	652	635	95	193	743	0
Turn Type	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	6
Permitted Phases	4	4	4	8	8	2	2	2	2	2	6	6
Actuated Green, G (s)	60.9	50.9	70.9	63.1	52.0	65.6	53.0	34.4	45.5	41.6	28.0	28.0
Effective Green, g (s)	60.9	50.9	70.9	63.1	52.0	65.6	53.0	34.4	45.5	41.6	28.0	28.0
Actuated g/C Ratio	0.47	0.39	0.58	0.40	0.40	0.54	0.41	0.28	0.38	0.32	0.22	0.22
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	192	1372	915	353	1402	852	633	927	609	286	726	726
v/s Ratio Prot	0.08	0.19	0.06	0.04	0.42	0.02	0.16	0.18	0.01	0.07	0.22	0.22
v/s Ratio Perm	0.39	0.17	0.17	0.20	0.10	0.26	0.05	0.05	0.05	0.15	0.15	0.15
v/c Ratio	0.98	0.49	0.49	0.50	1.04	0.23	1.03	0.69	0.16	0.67	1.02	1.02
Uniform Delay, d1	37.1	29.8	17.2	20.4	39.0	18.0	39.5	42.9	29.1	34.3	51.0	51.0
Progression Factor	0.64	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	57.6	0.3	0.3	1.1	34.6	0.1	43.7	4.1	0.1	6.2	38.6	38.6
Delay (s)	81.3	31.3	33.9	21.5	73.6	18.2	83.2	47.0	29.2	40.5	90.6	90.6
Level of Service	F	C	C	C	E	B	F	D	C	D	F	F
Approach Delay (s)	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Approach LOS	D	D	D	D	D	D	D	D	D	D	D	D
Intersection Summary	Intersection Summary											
HCM Average Control Delay	58.7											
HCM Volume to Capacity ratio	0.97											
Actuated Cycle Length (s)	130.0											
Intersection Capacity Utilization	100.0%											
Analysis Period (min)	15											
c Critical Lane Group	15											

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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

																							
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR											
Lane Configurations																							
Volume (veh/h)	32	2158	41	103	530	53	0	0	198	0	0	34											
Sign Control	Free			Free			Stop			Stop													
Grade	0%			0%			0%			0%													
Peak Hour Factor	0.85	0.85	0.85	0.83	0.83	0.83	0.85	0.85	0.85	0.85	0.85	0.85											
Hourly flow rate (vph)	38	2539	48	124	639	64	0	0	233	0	0	40											
Pedestrians																							
Lane Width (ft)																							
Walking Speed (ft/s)																							
Percent Blockage																							
Right turn flare (veh)																							
Median type	None			None																			
Median storage (veh)																							
Upstream signal (ft)	801																						
pX, platoon unblocked				0.71			0.71			0.71													
vC, conflicting volume	702				2587				3222	3565	1269	2496											
vC1, stage 1 conf vol																							
vC2, stage 2 conf vol																							
vCu, unblocked vol	702				2416				3313	3798	554	2288											
tC, single (s)	4.2				4.2				7.6	6.6	7.0	7.6											
tC, 2 stage (s)																							
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5											
p0 queue free %	96				8				100	100	30	100											
cM capacity (veh/h)	884				135				0	0	335	1											
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1														
Volume Total	38	1269	1269	48	124	426	277	233	40														
Volume Left	38	0	0	0	124	0	0	0	0														
Volume Right	0	0	0	48	0	0	64	233	40														
cSH	884	1700	1700	1700	135	1700	1700	335	642														
Volume to Capacity	0.04	0.75	0.75	0.03	0.92	0.25	0.16	0.70	0.06														
Queue Length 95th (ft)	3	0	0	0	154	0	0	123	5														
Control Delay (s)	9.3	0.0	0.0	0.0	120.1	0.0	0.0	37.0	11.0														
Lane LOS	A				F				E	B													
Approach Delay (s)	0.1				18.0				37.0	11.0													
Approach LOS										E													
Intersection Summary																							
Average Delay	6.5																						
Intersection Capacity Utilization	78.6%			ICU Level of Service			D																
Analysis Period (min)	15																						

2015 AM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis 8: Montano Rd & Winterhaven Rd

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	838	34	312	1420	342	0	0	200	0	0	80
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	69	864	35	328	1495	360	0	0	235	0	0	94
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)	801											
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	1855			899			2500	3514	432	3137	3369	927
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1855			823			2482	3532	339	3142	3382	927
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	78			57			100	100	63	100	100	65
cM capacity (veh/h)	318			768			5	2	631	2	3	268
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	69	432	432	35	328	996	858	235	94			
Volume Left	69	0	0	0	328	0	0	0	0			
Volume Right	0	0	0	35	0	0	360	235	94			
cSH	318	1700	1700	1700	768	1700	1700	631	268			
Volume to Capacity	0.22	0.25	0.25	0.02	0.43	0.59	0.50	0.37	0.35			
Queue Length 95th (ft)	20	0	0	0	54	0	0	43	38			
Control Delay (s)	19.4	0.0	0.0	0.0	13.1	0.0	0.0	14.1	25.5			
Lane LOS	C				B			B	D			
Approach Delay (s)	1.4				2.0			14.1	25.5			
Approach LOS								B	D			
Intersection Summary												
Average Delay	3.3											
Intersection Capacity Utilization	61.8%				ICU Level of Service				B			
Analysis Period (min)	15											

2015 PM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis 9: Montano Rd & Antequera Ave

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	2433	134	0	744	0	77
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	2862	158	0	875	0	91
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.70		0.70	0.70
vC, conflicting volume			3020		3300	1431
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3029		3429	758
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	63
cM capacity (veh/h)			76		4	243
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	1431	1431	158	438	438	91
Volume Left	0	0	0	0	0	0
Volume Right	0	0	158	0	0	91
cSH	1700	1700	1700	1700	1700	243
Volume to Capacity	0.84	0.84	0.09	0.26	0.26	0.37
Queue Length 95th (ft)	0	0	0	0	0	41
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	28.4
Lane LOS						D
Approach Delay (s)	0.0			0.0		28.4
Approach LOS						D
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			78.7%		ICU Level of Service	D
Analysis Period (min)			15			

2015 AM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis
9: Montano Rd & Antequera Ave

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	844	163	0	1751	0	101
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.85	0.85
Hourly flow rate (vph)	888	172	0	1843	0	119
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1060		1810	444
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			852		1683	170
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	84
cM capacity (veh/h)			701		76	759
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	444	444	172	922	922	119
Volume Left	0	0	0	0	0	0
Volume Right	0	0	172	0	0	119
cSH	1700	1700	1700	1700	1700	759
Volume to Capacity	0.26	0.26	0.10	0.54	0.54	0.16
Queue Length 95th (ft)	0	0	0	0	0	14
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.6
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.6
Approach LOS						B
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			51.7%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 10: E-W St & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	125	2228	78	0	2173		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90		
Hourly flow rate (vph)	0	147	2476	87	0	2414		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage (veh)								
Upstream signal (ft)						707		
pX, platoon unblocked	0.71							
vC, conflicting volume	3324	662			2562			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	2849	662			2562			
tC, single (s)	6.9	7.0			4.2			
tC, 2 stage (s)								
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	63			100			
cM capacity (veh/h)	9	402			167			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	147	707	707	707	440	805	805	805
Volume Left	0	0	0	0	0	0	0	0
Volume Right	147	0	0	0	87	0	0	0
cSH	402	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.37	0.42	0.42	0.42	0.26	0.47	0.47	0.47
Queue Length 95th (ft)	41	0	0	0	0	0	0	0
Control Delay (s)	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	19.0	0.0				0.0		
Approach LOS	C							
Intersection Summary								
Average Delay		0.5						
Intersection Capacity Utilization		48.0%		ICU Level of Service		A		
Analysis Period (min)		15						

2015 AM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis
10: E-W St & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchro 7

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	282	2758	164	0	2618		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.85	0.85	0.96	0.96	0.96	0.96		
Hourly flow rate (vph)	0	332	2873	171	0	2727		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage (veh)								
Upstream signal (ft)						707		
pX, platoon unblocked	0.73							
vC, conflicting volume	3867	804			3044			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	3628	804			3044			
tC, single (s)	6.9	7.0			4.2			
tC, 2 stage (s)								
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	0			100			
cM capacity (veh/h)	3	324			107			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	332	821	821	821	581	909	909	909
Volume Left	0	0	0	0	0	0	0	0
Volume Right	332	0	0	0	171	0	0	0
cSH	324	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	1.02	0.48	0.48	0.48	0.34	0.53	0.53	0.53
Queue Length 95th (ft)	291	0	0	0	0	0	0	0
Control Delay (s)	93.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F							
Approach Delay (s)	93.3	0.0				0.0		
Approach LOS	F							
Intersection Summary								
Average Delay		5.1						
Intersection Capacity Utilization		66.8%		ICU Level of Service		C		
Analysis Period (min)		15						

2015 PM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchros 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	0	113	2156	82	220	1953			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90			
Hourly flow rate (vph)	0	133	2396	91	244	2170			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage veh									
Upstream signal (ft)			1190						
pX, platoon unblocked	0.75	0.75			0.75				
vC, conflicting volume	3653	644			2487				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2859	0			1298				
tC, single (s)	6.9	7.0			4.2				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	84			38				
cM capacity (veh/h)	4	808			392				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	133	684	684	684	433	244	723	723	723
Volume Left	0	0	0	0	0	244	0	0	0
Volume Right	133	0	0	0	91	0	0	0	0
cSH	808	1700	1700	1700	1700	392	1700	1700	1700
Volume to Capacity	0.16	0.40	0.40	0.40	0.25	0.62	0.43	0.43	0.43
Queue Length 95th (ft)	15	0	0	0	0	102	0	0	0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	28.3	0.0	0.0	0.0
Lane LOS	B					D			
Approach Delay (s)	10.3	0.0				2.9			
Approach LOS	B								
Intersection Summary									
Average Delay			1.6						
Intersection Capacity Utilization			51.5%		ICU Level of Service			A	
Analysis Period (min)			15						

2015 AM Peak BUILD Conditions

2005 Approved Plan
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HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, P.E.
11/22/2011 - Synchro 7



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↑↑↑	↘	↗	↑↑↑
Volume (veh/h)	0	226	2606	186	286	2330
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	266	2715	194	298	2427
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			1190			
pX, platoon unblocked	0.60	0.60			0.60	
vC, conflicting volume	4216	776			2908	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3039	0			868	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	59			35	
cM capacity (veh/h)	2	651			461	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	266	776	776	776	582	298	809	809	809
Volume Left	0	0	0	0	0	298	0	0	0
Volume Right	266	0	0	0	194	0	0	0	0
cSH	651	1700	1700	1700	1700	461	1700	1700	1700
Volume to Capacity	0.41	0.46	0.46	0.46	0.34	0.65	0.48	0.48	0.48
Queue Length 95th (ft)	50	0	0	0	0	112	0	0	0
Control Delay (s)	14.3	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0
Lane LOS	B					D			
Approach Delay (s)	14.3	0.0				2.8			
Approach LOS	B								

Intersection Summary									
Average Delay		2.0							
Intersection Capacity Utilization		63.4%		ICU Level of Service			B		
Analysis Period (min)		15							

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