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

Traffic Impact Study UPDATE

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DRAFT

Presented to:

City of Albuquerque
Transportation Development Section
&
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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-3) 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, and the impact fee administrator, 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. A horizon year analysis was not required for this study.

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.
 - *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 building 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.)*

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.

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-2 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 plan proposed and approved in 2005. The resulting number of trips generated for the currently proposed development (and comparison with the previous plan) 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)	69.70	5,371	76	49	245	255
NORTH TRACT	Drive-In Bank (912)	3	418	16	12	40	42
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	19.10	2,429	114	106	126	87
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	6.00	763	36	33	39	27
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			19,608	512	483	1,148	1,053
Subtotal (Commercial Trips)			17,247	459	343	1,009	960
Pass-by Trip Reduction		35%	(6,036)	(161)	(120)	(353)	(336)
Net New Commercial Trips on Adjacent Transportation System			11,211	298	223	656	624
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			13,572	351	363	795	717
Net New Trips Utilized in Original Traffic Impact Study			19,363	502	620	1,038	966
Net Increase (Decrease) in Traffic Generated			(5,791)	(151)	(257)	(243)	(189)
Percentage Increase (-Decrease) in Traffic Generated			-30%	-30%	-41%	-23%	-21%

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 35 percent was used for this analysis.

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 #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 recommendations made in the 2007 Traffic Impact Study for 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		2011 PLAN	NO BUILD			2005 PLAN		2011 PLAN
Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay		Lanes	LOS-Delay	LOS-Delay
Eastbound - Montano Rd.											
L 2	E - 55.6		2	E - 55.6	E - 55.6	2	F - 202		2	F - 202	F - 202
T 2	F - 154		2	F - 165	F - 172	2	D - 43.3		2	D - 51.2	D - 50.2
R 1	C - 28.9		1	C - 27.8	C - 28.0	1	D - 35.2		1	D - 44.6	D - 43.4
Westbound - Montano Rd.											
L 2	E - 62.7		2	F - 122	F - 82.3	2	E - 68.9		2	D - 48.2	D - 44.3
T 2	C - 33.9		2	C - 33.9	C - 34.7	2	F - 160		2	F - 202	F - 202
R >	C - 33.9		>	C - 33.9	C - 34.7	>	F - 160		>	F - 202	F - 202
Northbound - Coors Blvd.											
L 2	F - 144		2	F - 183	F - 131	2	F - 179		2	F - 209	F - 207
T 3	E - 67.8		3	F - 120	F - 90.4	3	D - 41.1		3	D - 44.9	D - 44.0
R 1	F - 107		2	C - 20.8	B - 20.0	1	B - 12.6		2	B - 11.9	B - 13.5
Southbound - Coors Blvd.											
L 2	F - 218		2	F - 203	F - 198	2	F - 122		2	F - 126	F - 119
T 3	D - 51.1		3	E - 75.1	E - 65.0	3	F - 93.8		3	F - 141	F - 121
R 1	B - 18.1		1	B - 19.8	B - 19.2	1	C - 26.4		1	C - 27.7	C - 27.1
Intersection:	F - 96.3			F - 108	F - 96.4		F - 95.7			F - 116	F - 111

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.

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	245	200	2	1,172	725	1	326	425
AM BUILD Queue	2	245	200	2	1,211	750	1	366	450
Existing Lane Length	2	262	290	2	271	Cont	1	357	290
PM NO BUILD Queue	2	275	250	2	301	250	1	391	525
PM BUILD Queue	2	275	250	2	391	325	1	486	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	242	200	2	226	200	0	155	225
AM BUILD Queue	2	260	225	2	226	200	0	155	225
Existing Lane Length	2	378	380	2	1,051	Cont	0	154	0
PM NO BUILD Queue	2	397	325	2	1,101	750	0	161	250
PM BUILD Queue	2	431	350	2	1,101	750	0	161	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	279	225	3	1,183	550	2	652	450
AM BUILD Queue	2	341	275	3	1,229	550	2	652	450
Existing Lane Length	2	567	650	3	1,638	Cont	2	235	450
PM NO BUILD Queue	2	633	475	3	1,729	800	2	246	225
PM BUILD Queue	2	805	575	3	1,793	825	2	246	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	652	450	3	1,382	625	1	12	50
AM BUILD Queue	2	663	450	3	1,401	625	1	12	50
Existing Lane Length	2	314	475	3	1,463	Cont	1	65	320
PM NO BUILD Queue	2	329	275	3	1,544	725	1	68	125
PM BUILD Queue	2	354	300	3	1,599	750	1	68	125

AM PM
 Cycle Length: 120 130

NOTE: Queue lengths are in feet.

All calculated queue lengths at this intersection appear to be adequate. 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						2005 PLAN					
2011 PLAN						2011 PLAN					
Lanes	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	LOS-Delay	Lanes	LOS-Delay
Eastbound - Dellyne Ave. (Learning Rd.)											
L 1	F - 101	2	E - 56.5	E - 59.0	1	F - 96.2	2	E - 62.3	E - 63.1		
T 1	D - 37.5	1	F - 115	F - 91.8	1	E - 57.4	1	E - 56.1	E - 58.0		
R 1	E - 67.9	>	F - 115	F - 91.8	1	E - 56.7	>	E - 56.1	E - 58.0		
Westbound - Dellyne Ave. (Learning Rd.)											
L 1	E - 66.9	2	F - 120	F - 233	1	E - 73.1	2	F - 113	E - 71.7		
T 1	D - 48.1	1	D - 44.7	D - 44.7	1	E - 59.7	1	E - 60.9	E - 59.7		
R 1	D - 47.6	1	D - 45.8	D - 44.8	1	E - 57.8	1	D - 53.6	D - 54.2		
Northbound - Coors Blvd.											
L 1	C - 29.9	1	C - 31.6	C - 30.1	1	D - 53.0	1	E - 61.1	E - 60.2		
T 3	C - 29.7	3	C - 31.1	C - 27.2	3	B - 18.9	3	C - 30.5	C - 25.3		
R 1	F - 168	1	B - 17.5	B - 15.6	1	A - 8.3	1	B - 12.7	B - 10.9		
Southbound - Coors Blvd.											
L 1	E - 68.5	2	E - 73.9	E - 72.7	1	E - 62.3	2	E - 58.5	E - 58.7		
T 3	C - 26.9	3	C - 24.1	B - 19.6	3	B - 15.8	3	C - 20.4	B - 18.1		
R 1	A - 8.1	1	A - 2.3	A - 2.1	1	A - 1.3	1	A - 7.1	A - 5.8		
Intersection:											
D - 36.1		D - 40.5		D - 37.9		C - 23.6		D - 36.0		C - 29.7	

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 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: 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	269	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	175	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	138	125	1	32	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	242	225	1	78	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	1,722	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	2,567	>1,000 *	1	119	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	74	75	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	73	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 #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 - 27.3		1	F - 80.4	1	F - 81.5	F - 86.7	
T 2	F - 136	2	F - 157	F - 150		2	B - 18.3	2	C - 31.4	C - 31.7	
R 1	D - 35.4	1	D - 39.5	D - 38.7		1	A - 2.8	1	C - 34.0	C - 34.8	
Westbound - Montano Rd.											
L 1	F - 223	1	F - 223	F - 223		1	C - 20.2	1	C - 21.5	C - 21.9	
T 2	D - 37.5	2	D - 38.5	D - 37.9		2	D - 52.6	2	E - 73.6	E - 77.4	
R 1	C - 23.7	1	C - 24.3	C - 23.9		1	B - 17.6	1	B - 18.2	B - 18.7	
Northbound - Fourth St.											
L 2	F - 85.3	2	F - 114	F - 165		2	E - 59.0	2	F - 83.2	E - 75.7	
T 2	C - 32.5	2	C - 32.5	C - 32.5		2	D - 46.9	2	D - 47.0	D - 47.0	
R 1	C - 26.9	1	C - 26.9	C - 26.9		1	C - 29.1	1	C - 29.2	C - 29.2	
Southbound - Fourth St.											
L 1	C - 20.9	1	C - 20.9	C - 20.9		1	D - 41.5	1	D - 40.5	D - 40.5	
T 2	F - 129	2	F - 156	F - 137		2	E - 61.3	2	F - 90.8	F - 99.0	
R >	F - 129	>	F - 156	F - 137		>	E - 61.3	>	F - 90.8	F - 99.0	
Intersection: F - 93.6			F - 108			D - 43.6			E - 59.7		
			F - 104						E - 61.6		

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). 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.

The 2011 Plan for Andalucia, Tract 6 (commercial and residential) generates approximately 174 trips per hour during the 2015 AM Peak Hour period through this intersection. Total AM volume at the intersection is 5,285 vehicles per hour. The 2011

Plan comprises approximately 3% of the intersection traffic in the 2015 AM Peak Hour. The 2011 Plan generates about 396 vehicles per hour during the 2015 PM Peak Hour. Total volume at the intersection in the PM Peak Hour is 5,081 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 (1.9 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: Andalusia 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	225	2	1,298	800	1	505	600	
AM BUILD Queue	1	171	250	2	1,333	825	1	549	650	
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	197	300	2	639	475	1	380	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	271	225	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	564	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	275	2	516	375	0	1,027	>1,000	
AM BUILD Queue	1	204	275	2	516	375	0	1,046	>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	201	300	

AM **PM**
 Cycle Length: 120 130

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 (DRIVEWAY) 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	LOS-Delay		Lanes	LOS-Delay	LOS-Delay	LOS-Delay	
Eastbound - Montano Rd.									
L	1	A - 8.8	A - 9.0	A - 8.8	1	C - 19.3	C - 19.7	C - 18.9	
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 - 108	F - 308	F - 82.7	1	A - 9.9	B - 12.9	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 - 20.2	E - 46.7	C - 17.7	1	B - 11.3	B - 14.7	B - 14.5	
Southbound - Winterhaven Rd. (Mirandela)									
R	1	B - 10.5	B - 10.7	B - 10.4	1	D - 25.3	D - 26.4	D - 25.1	

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 165 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.

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	C - 19.6	E - 48.3	1	A - 0.0	B - 10.9	B - 10.8	

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.).

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
Westbound - E-W Street									
R	1	A - 0.0	A - 0.0	A - 0.0	1	A - 0.0	A - 0.0	A - 0.0	
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	C - 18.7	C - 15.8	0	A - 0.0	F - 68.3	E - 44.6	

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 constructed approximately midway between the E-W Street and Dellyne Ave. based on the approved 2005 Plan. The results of the analysis of the unsignalized intersection of Mirandela St. / Coors Blvd. are summarized in the following table:

Intersection: #10 - 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
Westbound - Mirandela Ave.									
R	1	A - 0.0	B - 10.3	A - 9.8	1	A - 0.0	B - 13.5	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	A - 0.0	C - 22.4	C - 20.2	1	A - 0.0	C - 24.9	D - 28.8	
T	3	A - 0.0	A - 0.0	A - 0.0	3	A - 0.0	A - 0.0	A - 0.0	

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

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 results of this analysis of the adjacent transportation system associated with the proposed commercial / residential development indicate that there will be minimal operational problems along Coors Blvd. at the intersections analyzed in this study. When compared with the approved 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).

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:

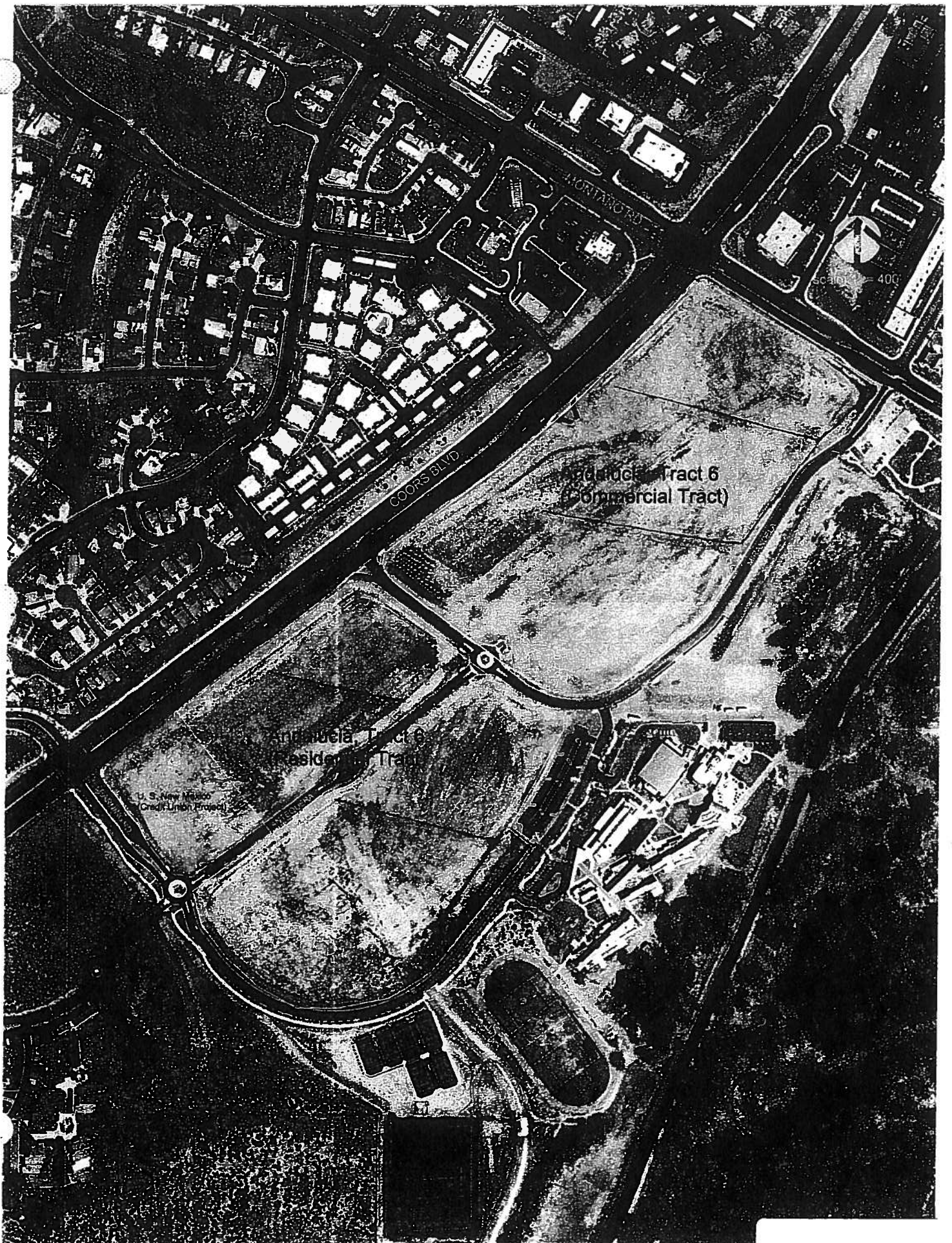
- **Dellyne Ave. (Learning Rd.) / Coors Blvd.** – Lengthen the existing eastbound dual left turn lanes as far as possible to try to achieve a total length of 225 feet plus transition. Extend the northbound left turn lane as far as possible to try to achieve a total length of 475 feet plus transition.

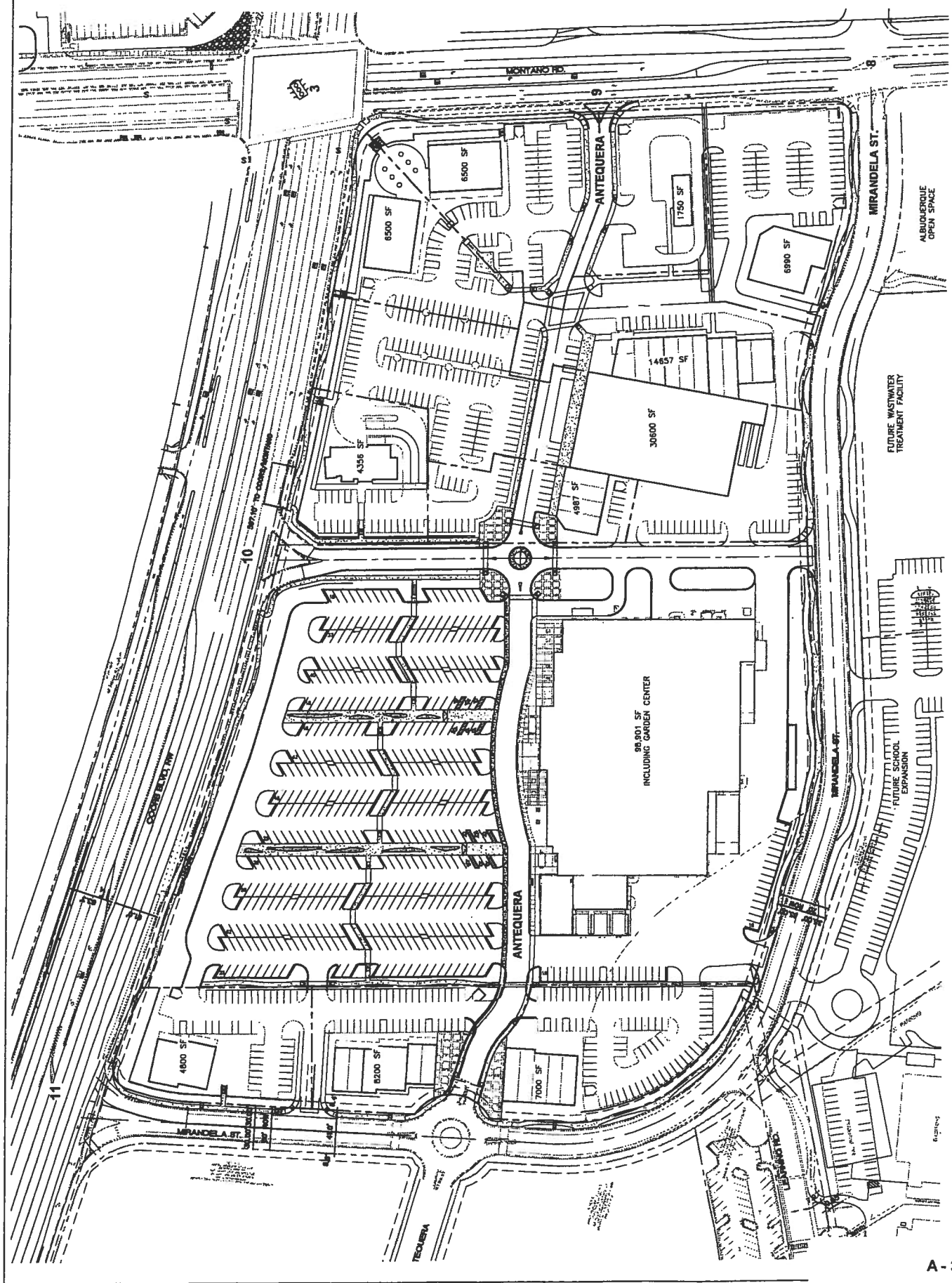
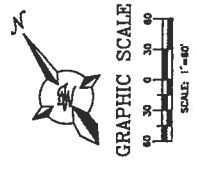
- **Montano Rd. / Winterhaven Dr. (Mirandela St.)** – lengthen the westbound left turn lane on Montano Rd. to a total length of 175 feet plus transition.
- **Montano Rd. / Antequera** – Acquire approval from the Transportation Coordinating Committee to construct the driveway on Montano Rd. as a right-in, 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.)

Appendix

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Appendix





Existing Proposed

- Facility with HOV Potential
- Unimproved Roadway
- Principal Arterial
- Minor Arterial
- Collector
- Dashed lines indicate proposed alignments.
- Grade Separation
- Interchange

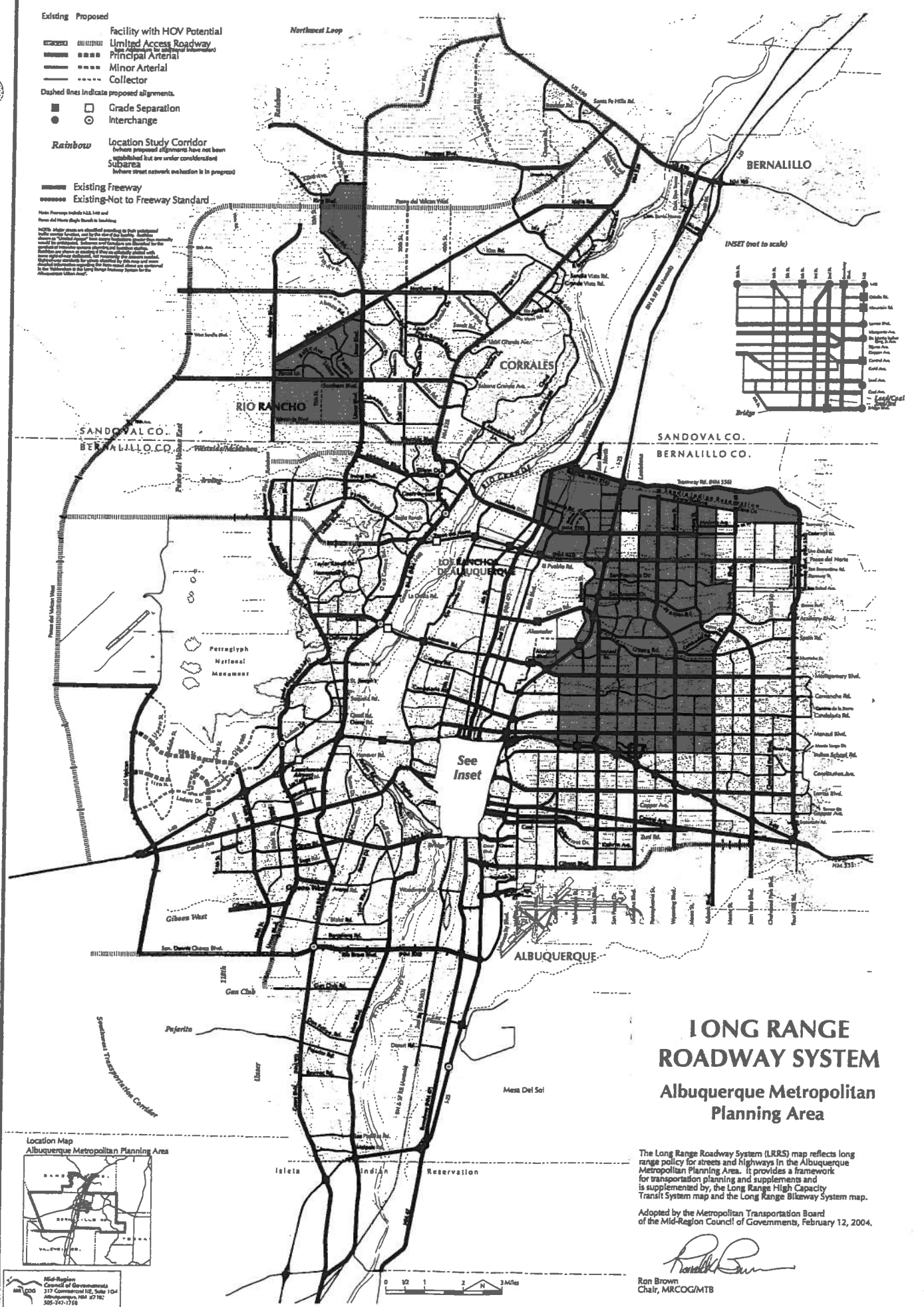
Rainbow

Location Study Corridor
between proposed alignments have not been
established but are under consideration
Subarea

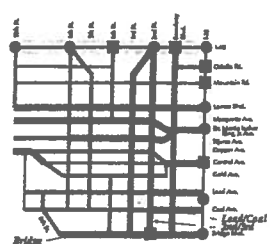
Existing Freeway
Existing-Not to Freeway Standard

Notes: Freeways include I-25, I-40 and
Future del Norte High Capacity Interchange

NOTE: After street are classified according to their intended
use, they are classified as follows: Major Arterial, Minor Arterial,
Collector, and Local Street. The classification is based on the
function of the street, not on its physical characteristics. The
classification is based on the function of the street, not on its
physical characteristics. The classification is based on the
function of the street, not on its physical characteristics.



INSET (not to scale)



See Inset

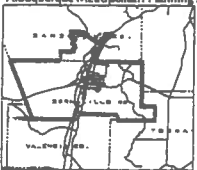
LONG RANGE ROADWAY SYSTEM Albuquerque Metropolitan Planning Area

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.

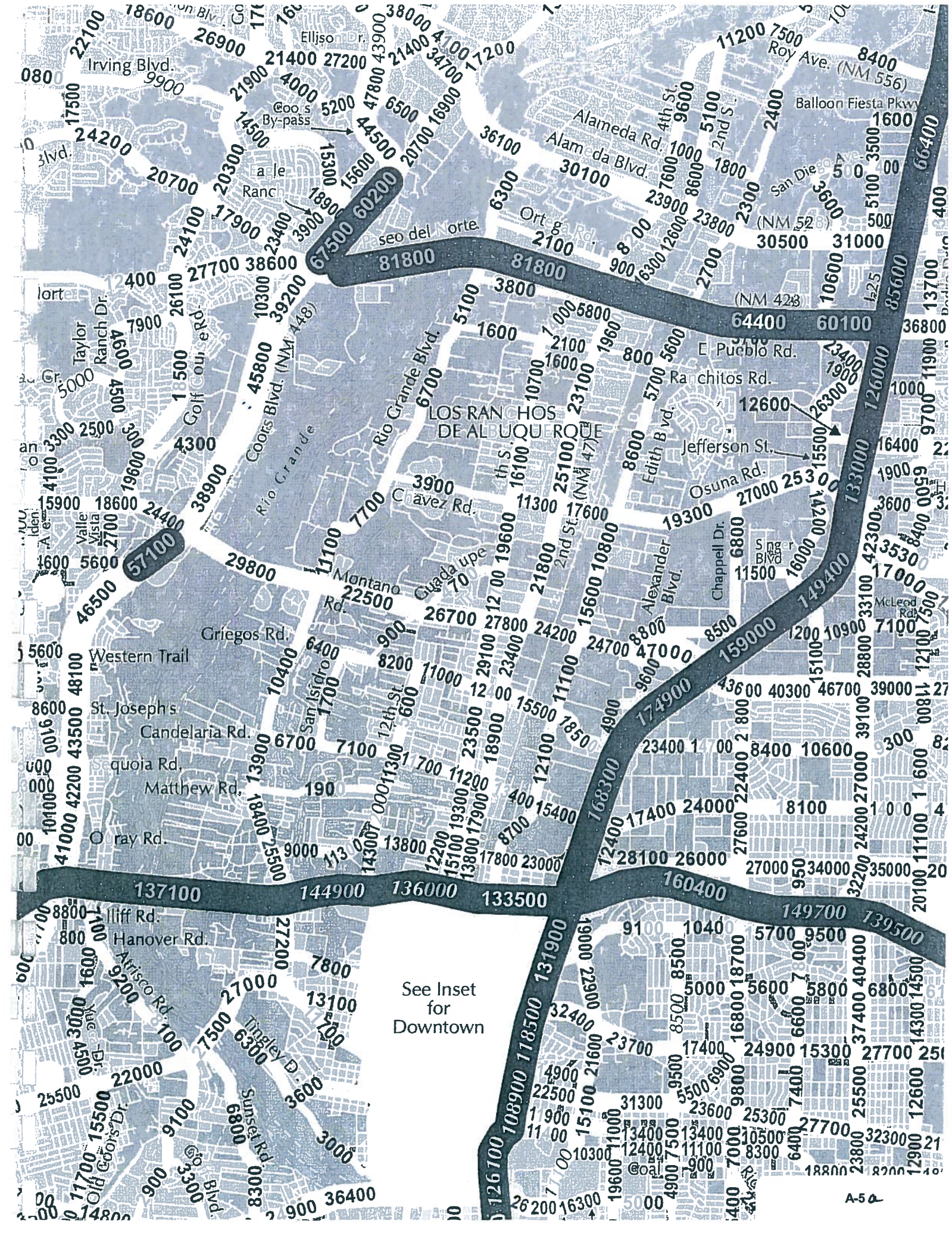
Ron Brown
Ron Brown
Chair, MRCOG/MTB

Location Map
Albuquerque Metropolitan Planning Area



Mid-Region
Council of Governments
3177 Government St., Suite 104
Albuquerque, NM 87102
505-241-1700





See Inset
for
Downtown

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	58	251	241	
Walmart (Dry Goods)	Free-Standing Discount Store (815)	59.00	2,363	43	20	148	148	
NORTH TRACT	Shopping Center (820)	69.70	5,371	78	49	245	255	
NORTH TRACT	Drive-In Bank (912)	3.00	418	18	12	40	42	
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	19.10	2,429	114	106	126	87	
NORTH TRACT	High Turnover (Sit-Down) Restaurant (932)	6.00	763	38	33	39	27	
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)	345.00	2,214	35	138	135	73	
Subtotal			19,608	512	483	1,148	1,053	
Subtotal (Commercial Trips)			17,247	459	343	1,009	960	
Pass-by Trip Reduction			35%	(6,036)	(161)	(120)	(353)	(336)
Net New Commercial Trips on Adjacent Transportation System			11,211	298	223	656	624	
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			13,572	351	363	795	717	
Net New Trips Utilized in Original Traffic Impact Study			19,363	502	620	1,038	906	
Net Increase (Decrease) in Traffic Generated			(5,791)	(151)	(257)	(243)	(189)	
Percentage Increase (-Decrease) in Traffic Generated			-30%	-30%	-41%	-23%	-21%	
NORTH TRACT (Walmart et al)								
Trips Generated by North Tract			15,414	373	276	849	800	
Pass-by Trip Reduction			35%	(5,395)	(131)	(97)	(297)	(280)
>> Net New Commercial Trips on Adjacent Transportation System			10,019	242	179	552	520	
				76.56%	79.56%	81.64%	80.75%	
SOUTH TRACT								
Trips Generated by South Tract			1,980	104	69	164	180	
Pass-by Trip Reduction (Commercial ONLY)			35%	(642)	(30)	(23)	(56)	(56)
>> Net New Commercial Trips on Adjacent Transportation System			1,338	74	46	108	124	
				23.42%	20.44%	16.36%	19.25%	
Total Commercial / Office Trips (Adj. for Passby)				316	225	660	644	
APARTMENTS TRACTS								
>> Residential Trips Generated			2,214	35	138	135	73	
Walmart Trips			6,433	131	76	399	389	
Pass-by Trip Reduction			35%	(2,252)	(46)	(27)	(140)	(136)
Net New Wal-Mart Trips on Adjacent Transportation System			4,181	85	49	259	253	
Balance of Net Commercial Trips			5,838	157	130	293	267	

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						
		4,070	88	56	251	241
		40.00				
		1,000 S.F.				
Supermarket (850)						

ITE Trip Generation Equations:

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

$$T = 66.95 (X) + 1391.56$$

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)

$$T = 3.59 (X) + 0$$

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)

$$\ln(T) = 0.61 \ln(X) + 3.95$$

51% Enter, 49% 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	43	20	148
		2,363			148
1,000 S.F.					

Free-Standing Discount Store (815)

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						
		5,371	76	49	245	255
		69.70				
Shopping Center (820)						
1,000 S.F.						

ITE Trip Generation Equations:

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

$$\ln(T) = \begin{matrix} 0.65 & \ln(X) + & 5.83 \\ 50\% & \text{Enter,} & 50\% \text{ Exit} \end{matrix}$$

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

$$\ln(T) = \begin{matrix} 0.59 & \ln(X) + & 2.32 \\ 61\% & \text{Enter,} & 39\% \text{ Exit} \end{matrix}$$

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

$$\ln(T) = \begin{matrix} 0.67 & \ln(X) + & 3.37 \\ 49\% & \text{Enter,} & 51\% \text{ Exit} \end{matrix}$$

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					
		3.00		40	42
Drive-In Bank (912)					
		418	16	12	
Drive-In Lanes					

ITE Trip Generation Equations:

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

$$T = 139.25 (X) + 0$$

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)

$$T = 9.44 (X) + 0$$

58% Enter, 42% Exit

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

$$T = 27.41 (X) + 0$$

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							
High Turnover (Sit-Down) Restaurant (932)		19.10	2,429	114	106	126	87
		1,000 S.F.					

ITE Trip Generation Equations:

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

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

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

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

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

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

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	
	GROSS	ENTER	EXIT	ENTER	EXIT
Units					
	6.00	36	33	39	27
1,000 S.F.					

High Turnover (Sit-Down) Restaurant (932)

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	
	GROSS	ENTER	EXIT	ENTER	EXIT	EXIT
Drive-In Bank (912)	1,833	86	67	160	160	160
Units						
12.37						
1,000 S.F.						

ITE Trip Generation Equations:

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

$$T = \frac{148.15 (X) + 0}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

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

$$T = \frac{12.35 (X) + 0}{56\% \text{ Enter, } 44\% \text{ Exit}}$$

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

$$T = \frac{25.82 (X) + 0}{50\% \text{ Enter, } 50\% \text{ Exit}}$$

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						
		147	18	2	4	20
General Office Building (710) - Less than 51,000 S.F.						
1,000 S.F.						

ITE Trip Generation Equations:

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

$$T = 14.729 (X) + 0$$

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)

$$T = 2.055 (X) + 0$$

88% Enter, 12% Exit

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

$$T = 2.369 (X) + 0$$

17% Enter, 83% 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					
Apartment, Post-1973 (220)		2,214	35	135	73
Dwelling Units					

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.

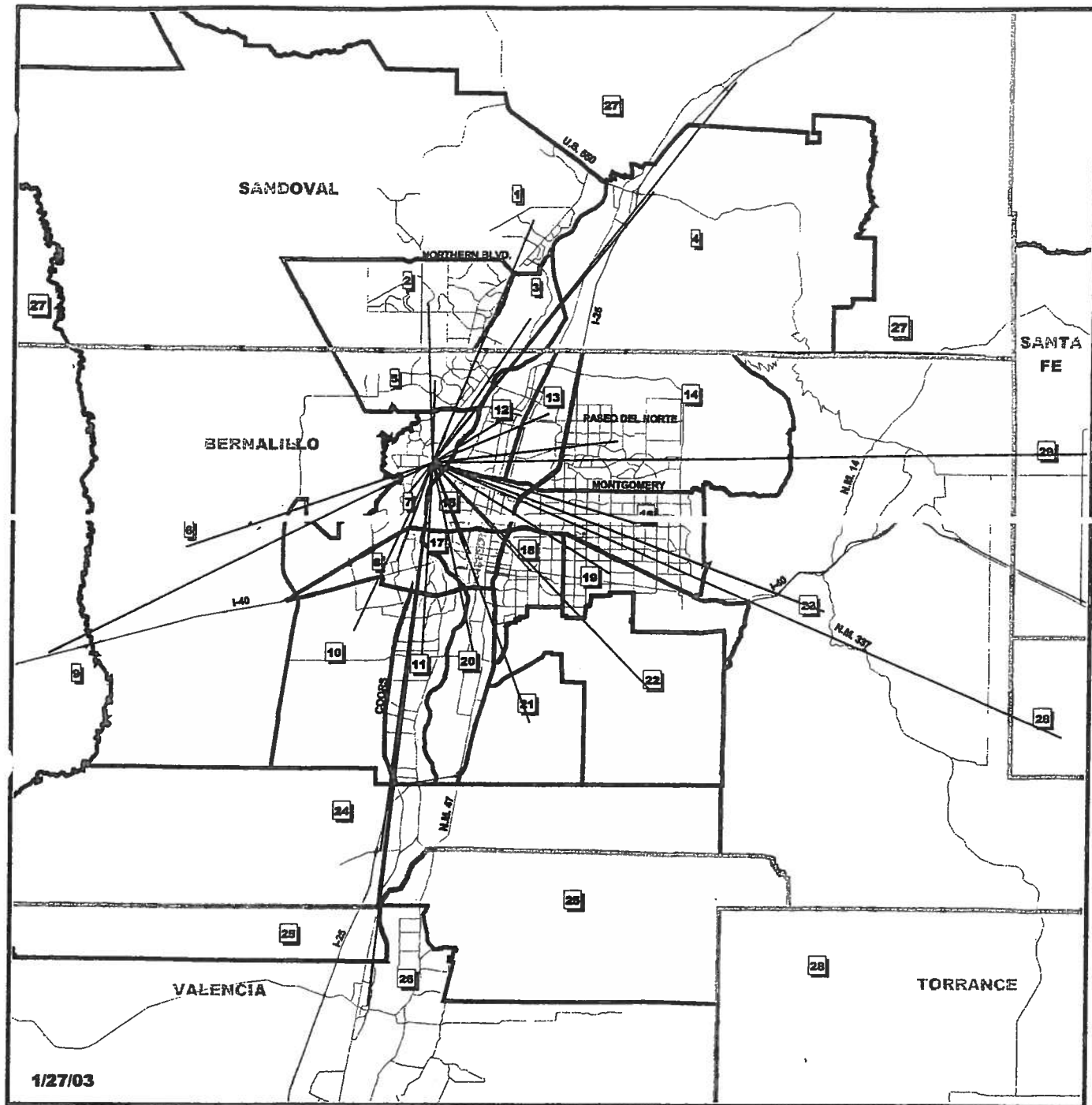


Figure 6

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.

Andalucia Update
(Montano Rd / Coors Blvd)
Trip Distribution Subarea Map

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)			(LE)			(MPE)			(WN)		
							Coors Blvd North			La Orilla Rd East			Montano Plaza East			Winterhaven Rd North		
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%	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

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

							(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	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			1,730			7,407			1,330		
							37,055			4.67%			19.99%			3.59%		
							100.00%			-			0.00%					

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

							(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
		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			11,778			932		
							37,055			100.00%			11.15%			31.79%		
													2.52%			956		
																24		
																2.58%		

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

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Walmart 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)			(LE)			(MPE)			(WN)			(4N)			(ME)			
DASZ #		% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population in Study	Percent Population	Coors Blvd North			La Orilla Rd East			Montano Plaza East			Winterhaven Rd North			Fourth St North			Montano Rd East		
								% 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	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	0%	0.00%	0	100%	0.25%	130	
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	5%	0.03%	14	
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	95%	0.82%	427	5%	0.04%	22	
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%	2.22%	1,162	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%	0.44%	231	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%	0.65%	341	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%	1.16%	606	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	100%	0.17%	89	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	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	100%	1.41%	737	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	100%	1.66%	868	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	100%	1.59%	833	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%	0.29%	150	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%	1.17%	610	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	100%	1.48%	772	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%																		

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

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Walmart 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)			(SE)			(WE)			(CS)			(WW)			(SW)			
								Fourth St South			Sevilla Ave East			Western Trail East			Coors Blvd South			Western Trail West			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.														

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

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Walmart 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)			(MW)			(MPW)			(LW)				
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	Population In Study	Percent Population	Dellyne Ave West			Montano Rd West			Montano Plaza West			La Orilla Rd West				
							% 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%				932 1.78%			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	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015															
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		0.67%	481		25.08%	18,116		5.40%	3,904		0.00%	0
									0.67%			25.08%			5.40%			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	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	2025	2015									
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.

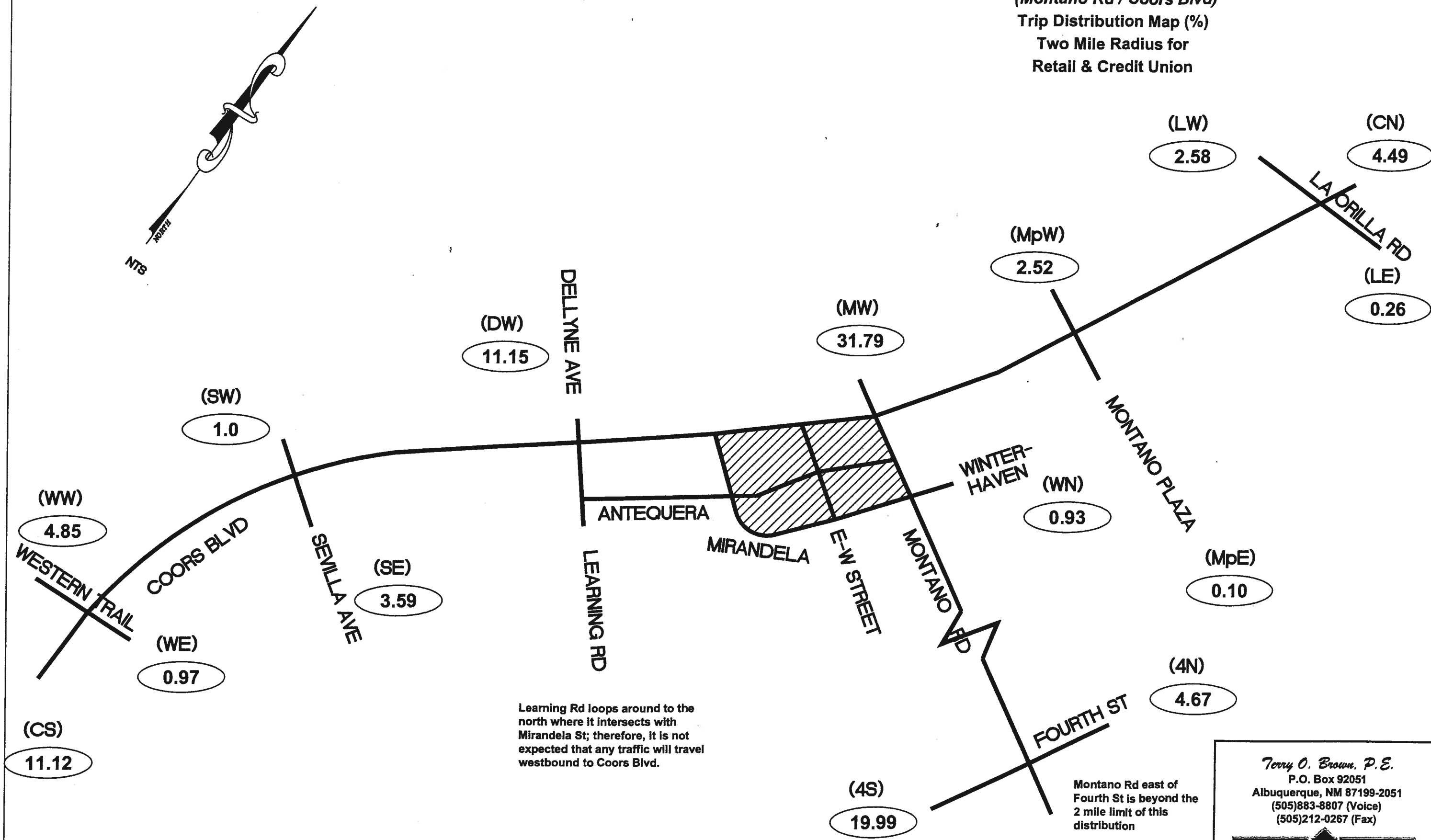
Walmart Development

(Montano Rd / Coors Blvd)

Trip Distribution Map (%)

Two Mile Radius for

Retail & Credit Union



Learning Rd loops around to the north where it intersects with Mirandela St; therefore, it is not expected that any traffic will travel westbound to Coors Blvd.

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

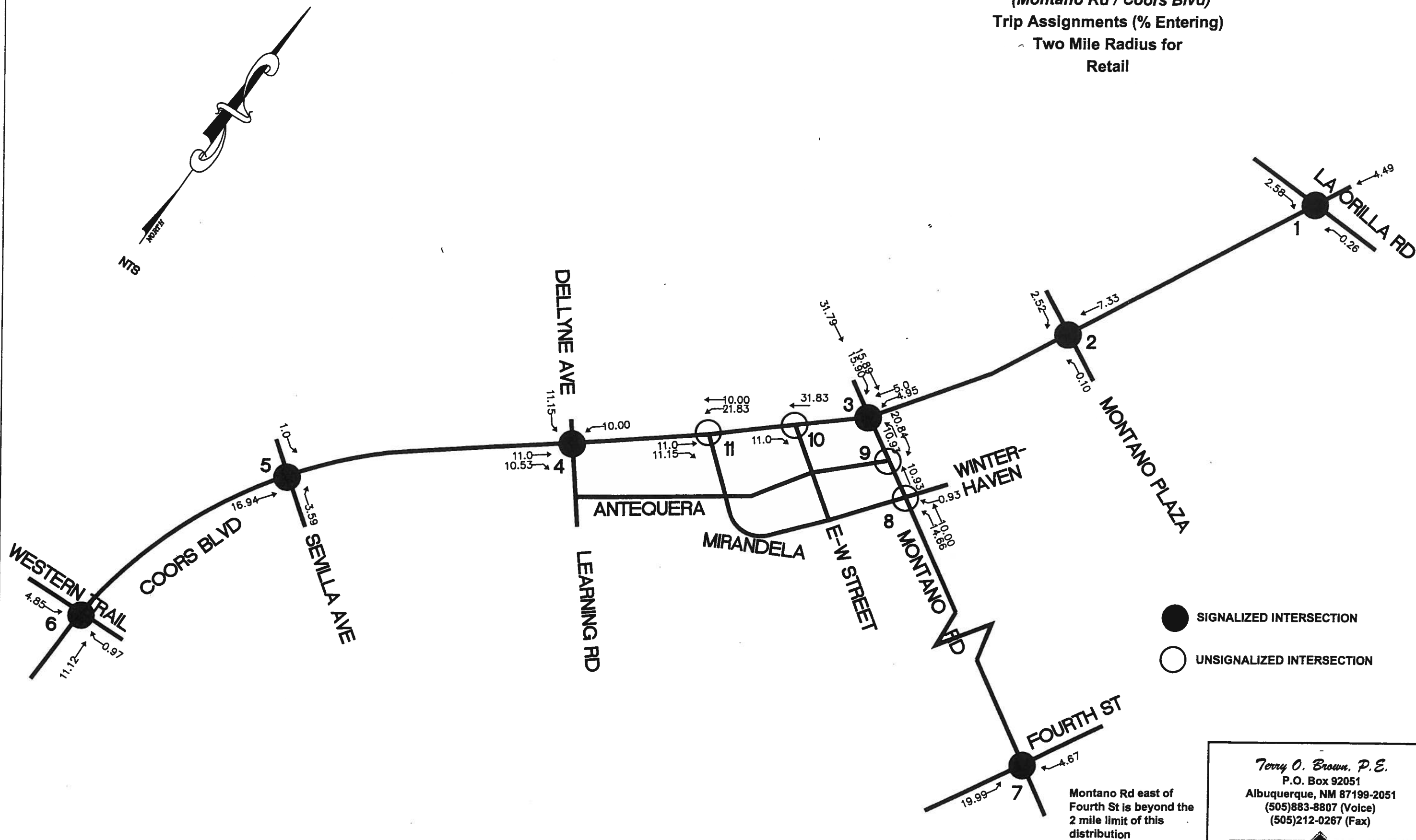
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Walmart Development

(Montano Rd / Coors Blvd)

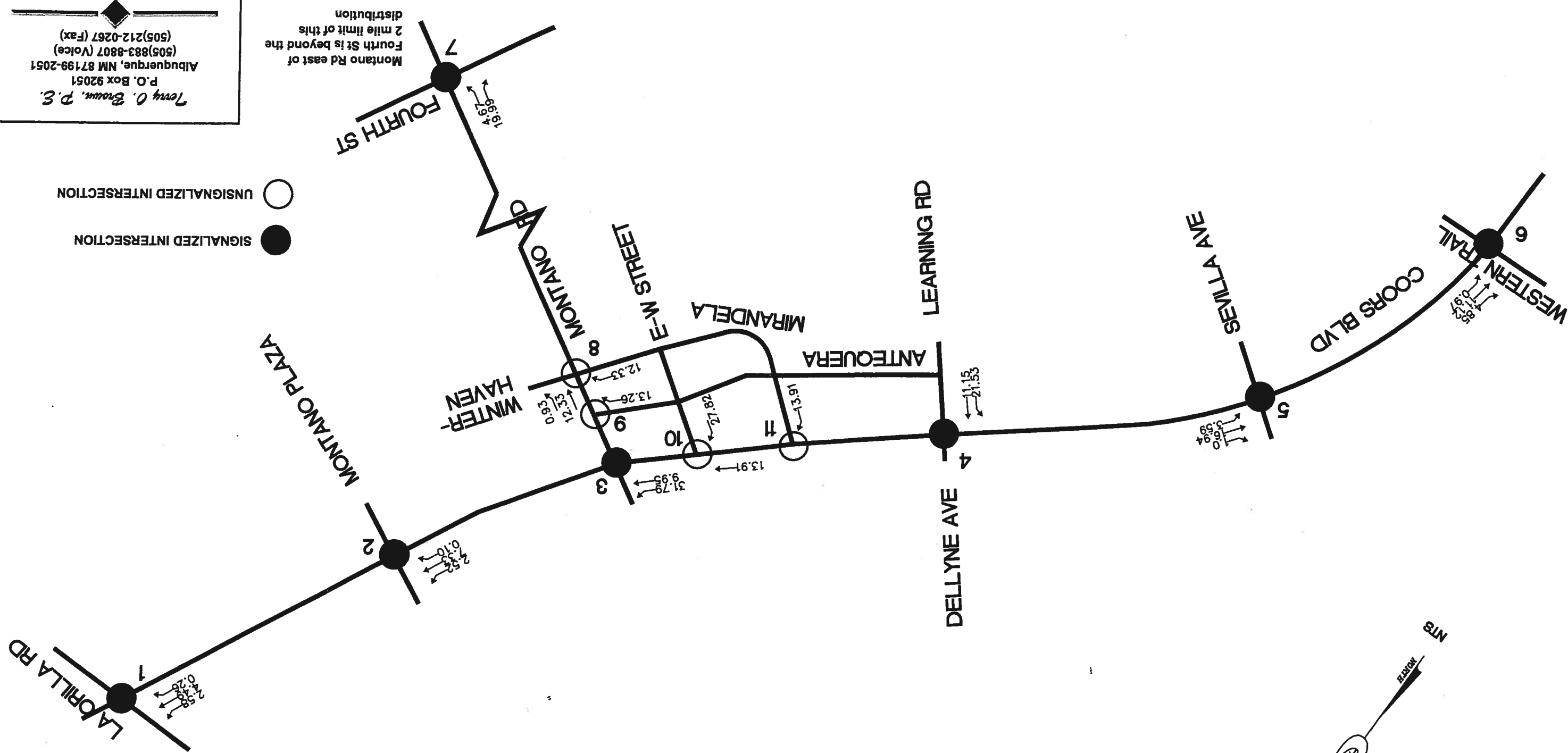
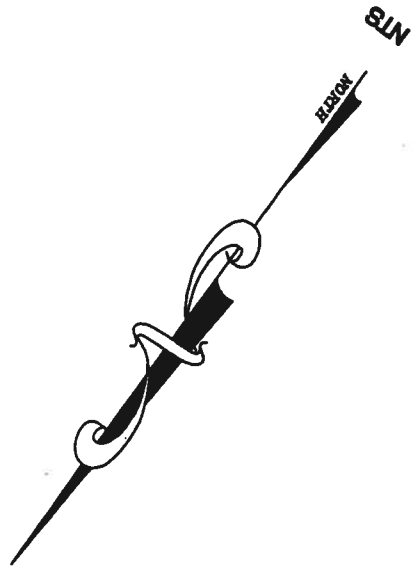
Trip Assignments (% Entering)

Two Mile Radius for
Retail



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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Exiting)
 Two Mile Radius for
 Retail

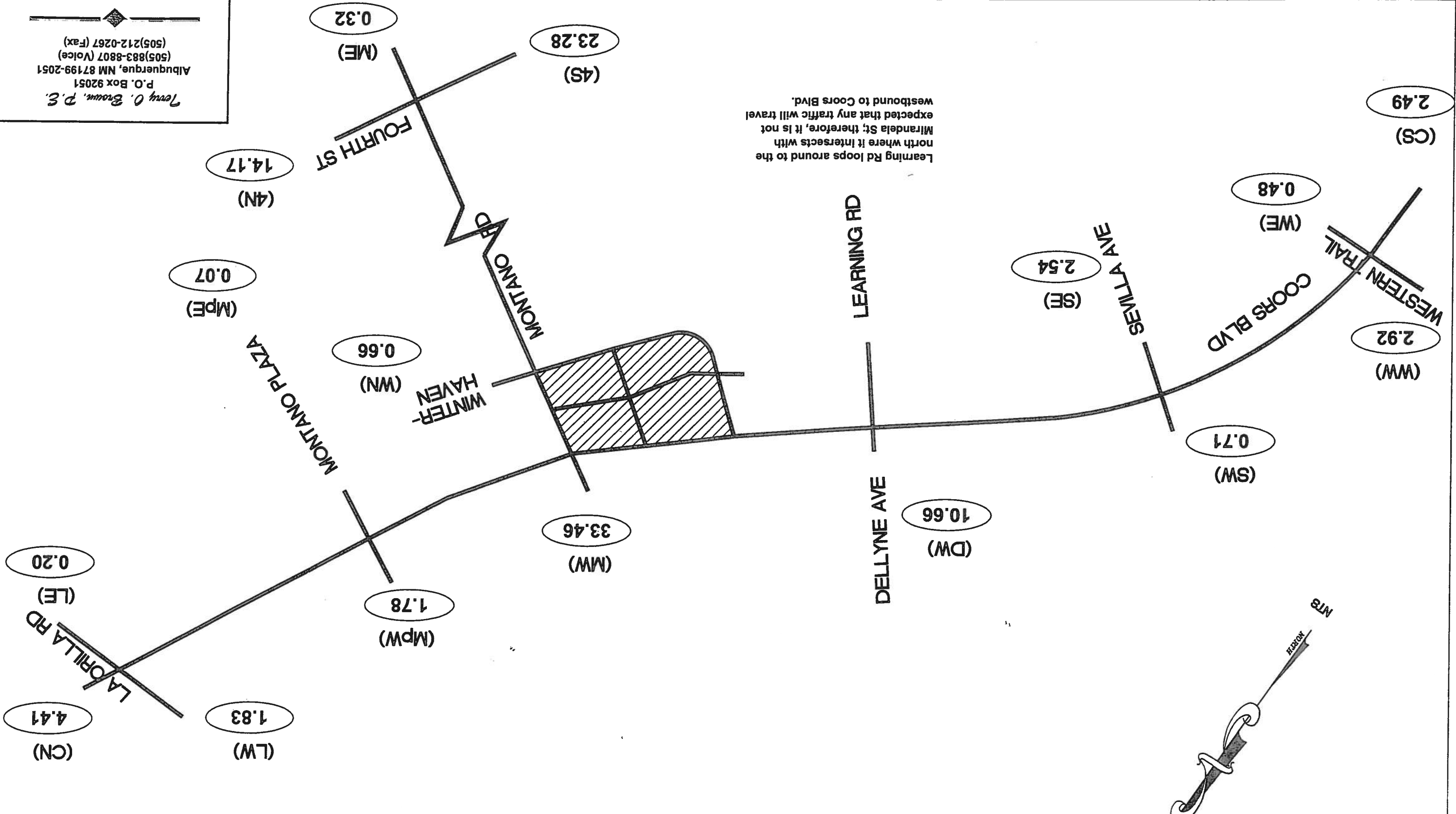


● SIGNALIZED INTERSECTION
 ○ UNSIGNALIZED INTERSECTION

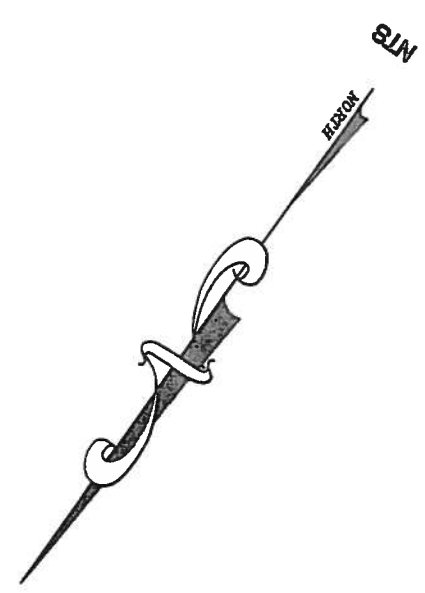
Montano Rd east of
 Fourth St is beyond the
 2 mile limit of this
 distribution

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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Distribution Map (%)
 Walmart Store only

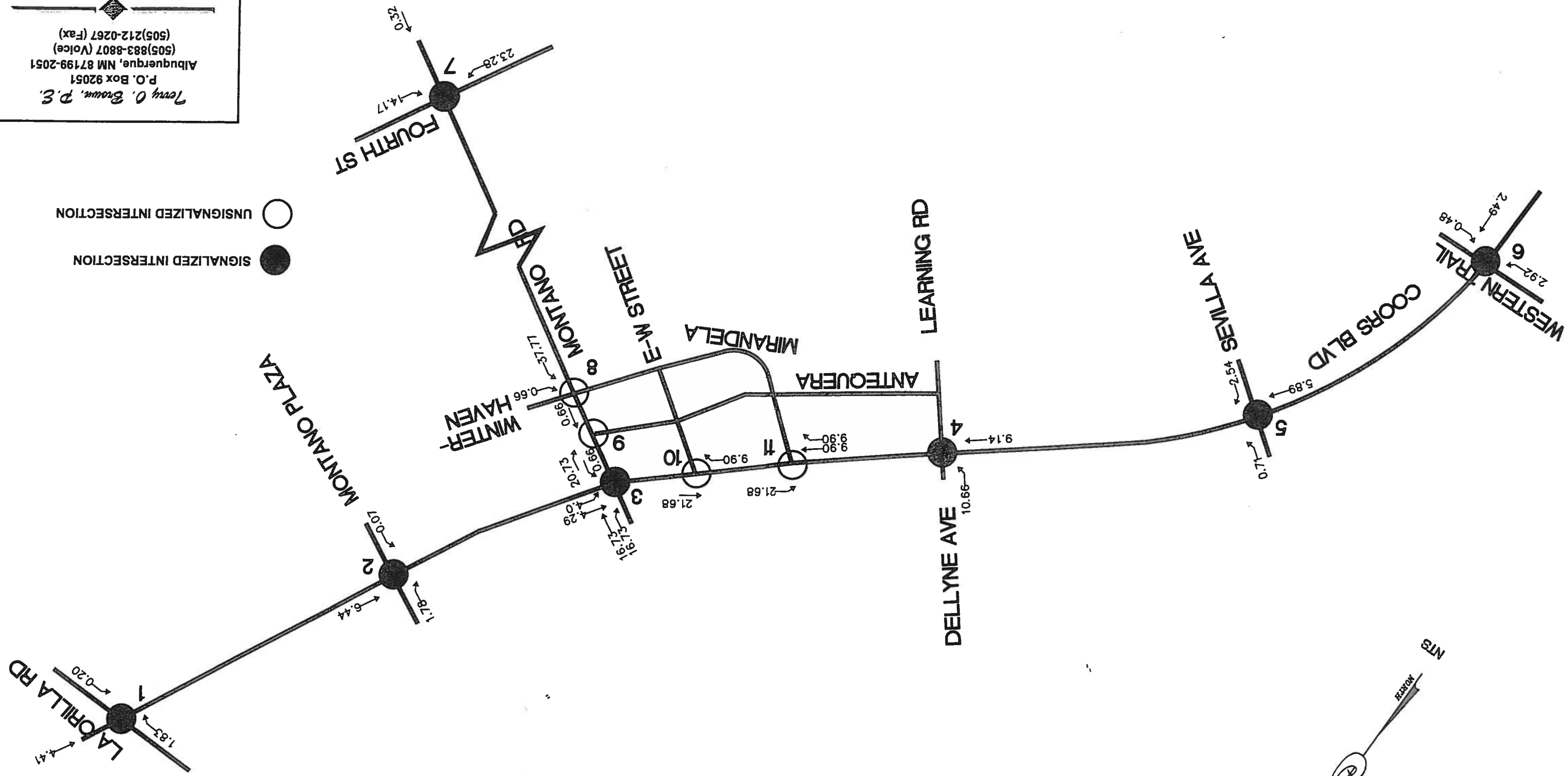
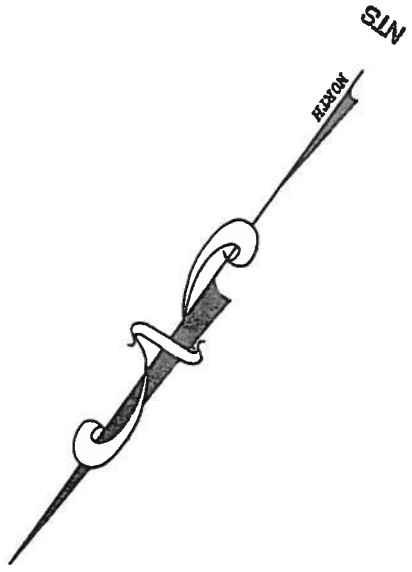


Learning Rd loops around to the north where it intersects with Miranda St; therefore, it is not expected that any traffic will travel westbound to Coors Blvd.



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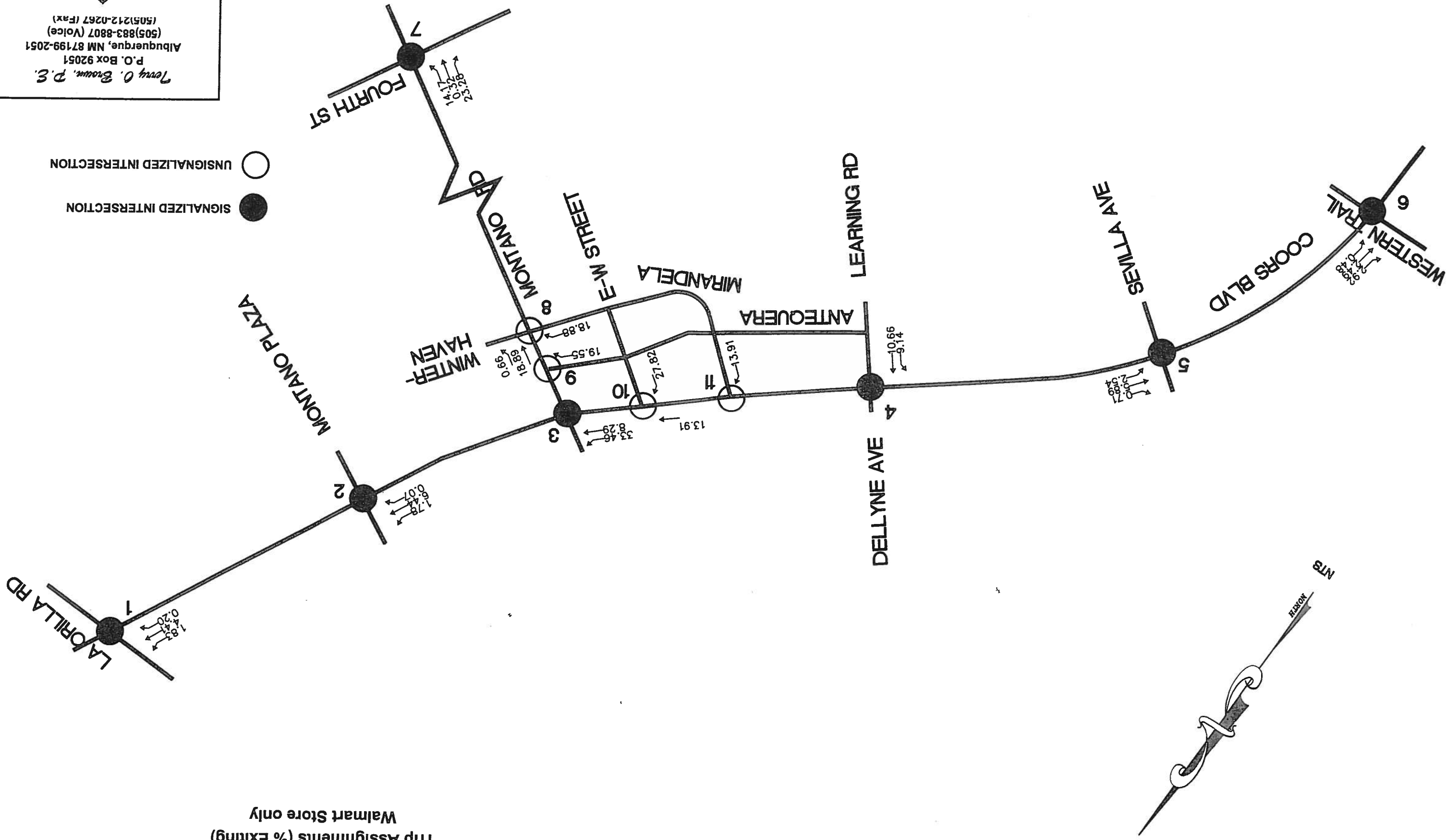
Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Entering)
 Walmart Store only



● SIGNALIZED INTERSECTION
 ○ UNSIGNALIZED INTERSECTION

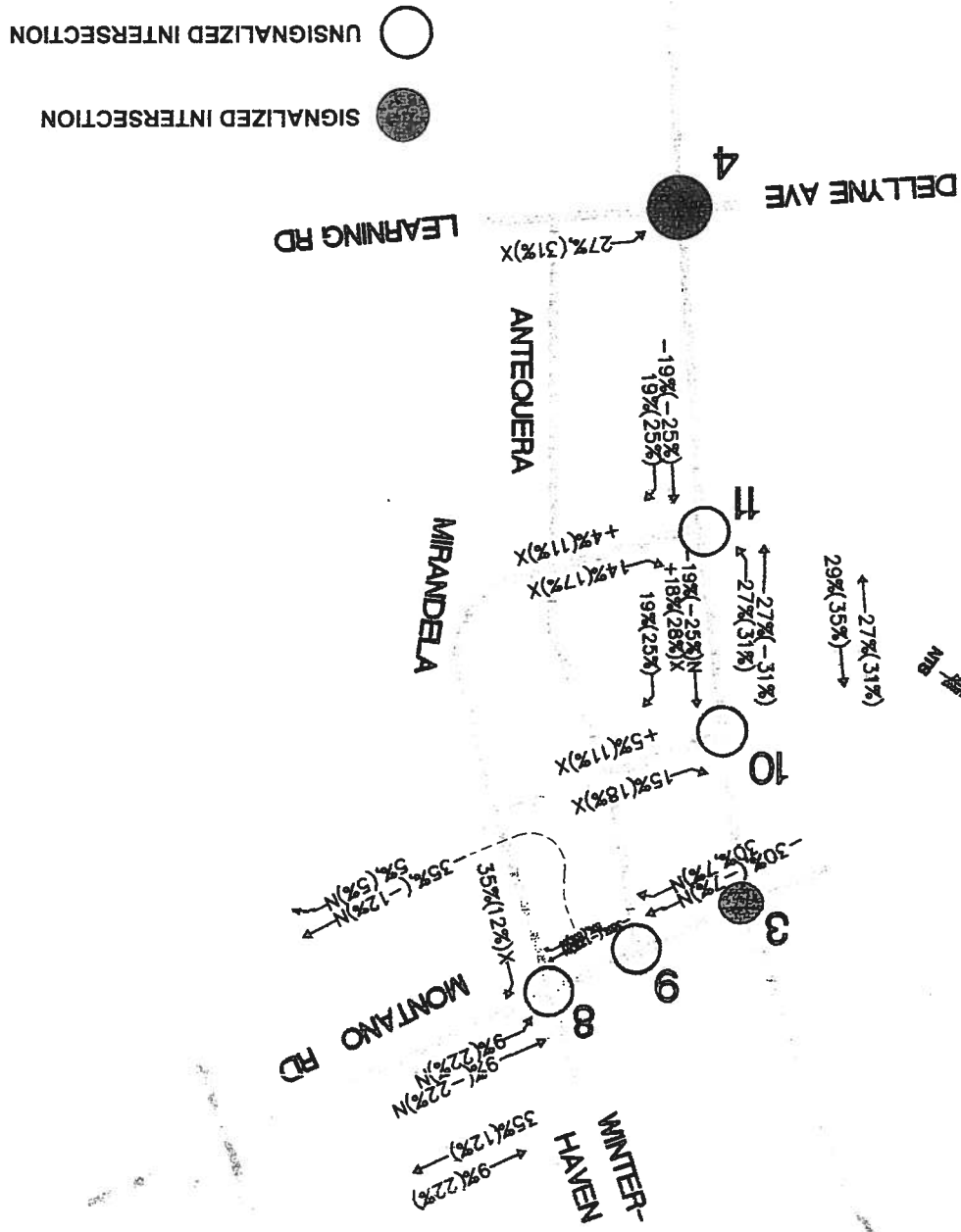
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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Exiting)
 Walmart Store only



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Walmart Development (Montano Rd / Coors Blvd) Pass-by Trips (%) Retail

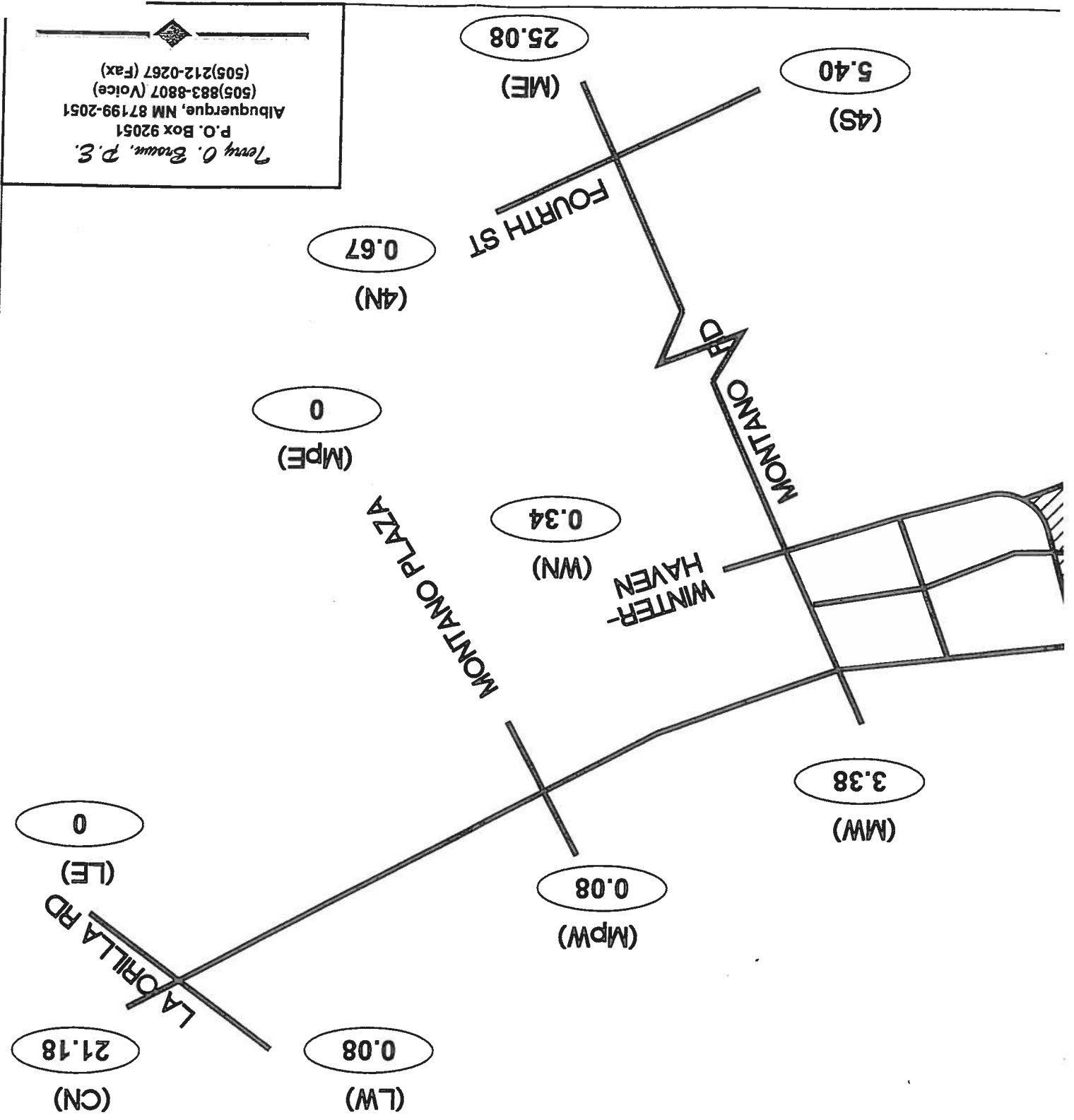


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Montano Rd east of
Fourth St is beyond the
2 mile limit of this
distribution

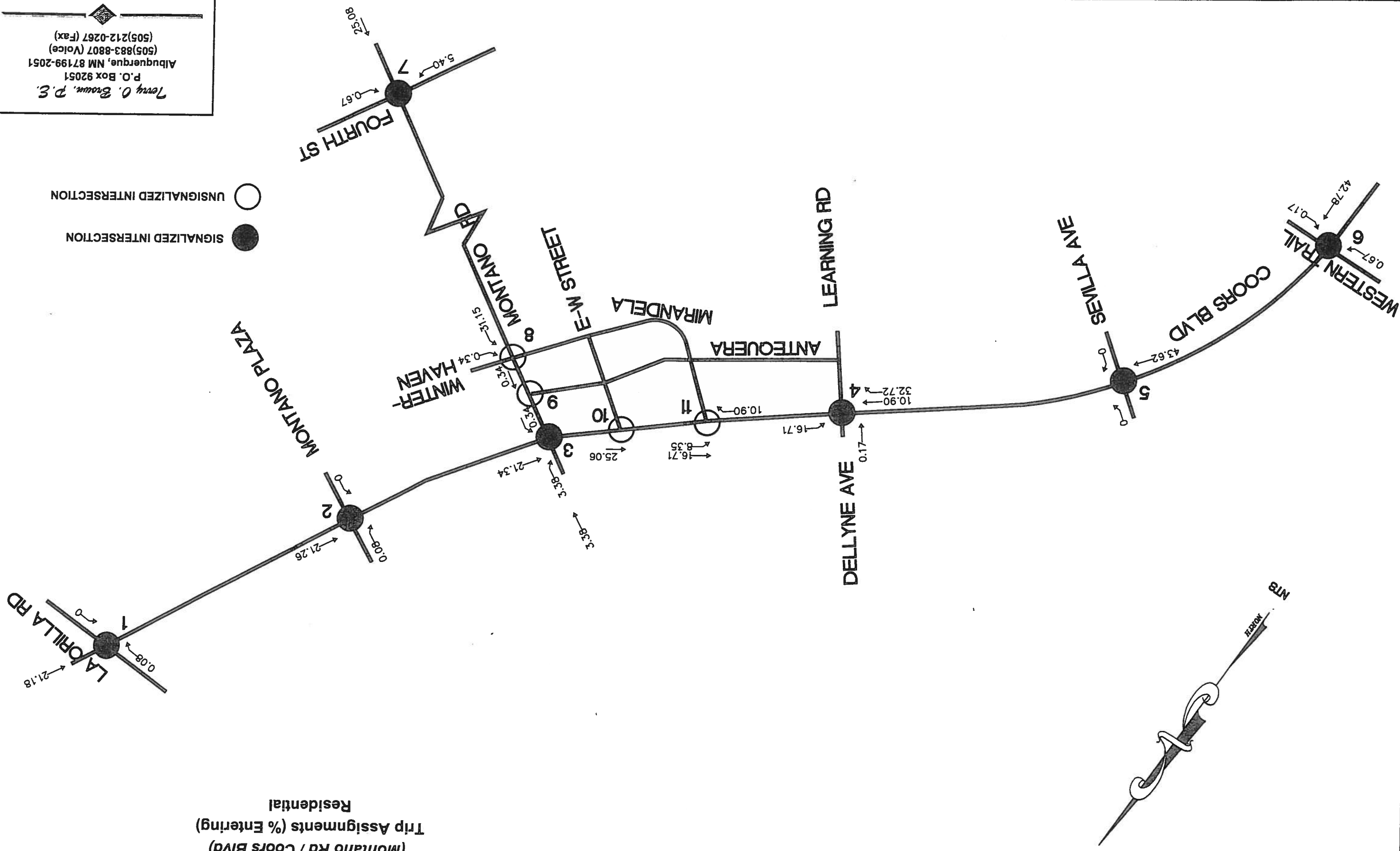
● SIGNALIZED INTERSECTION
○ UNSIGNALIZED INTERSECTION

Walmart Development (Montano Rd / Coors Blvd) Trip Distribution Map (%) Residential



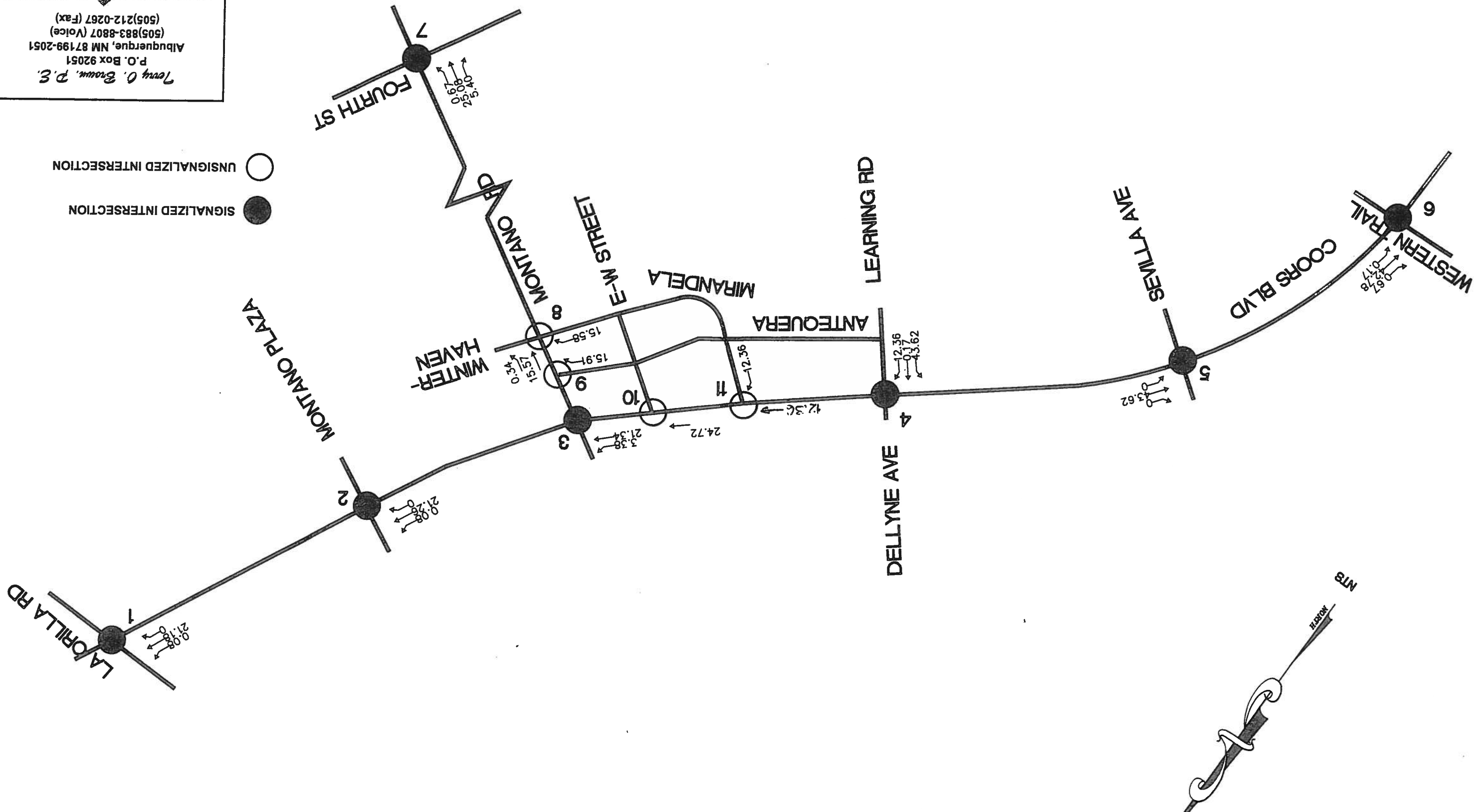
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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Entering)
 Residential



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 Albuquerque, NM 87199-2051
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Walmart Development
 (Montano Rd / Coors Blvd)
 Trip Assignments (% Exiting)
 Residential



● SIGNALIZED INTERSECTION
 ○ UNSIGNALIZED INTERSECTION

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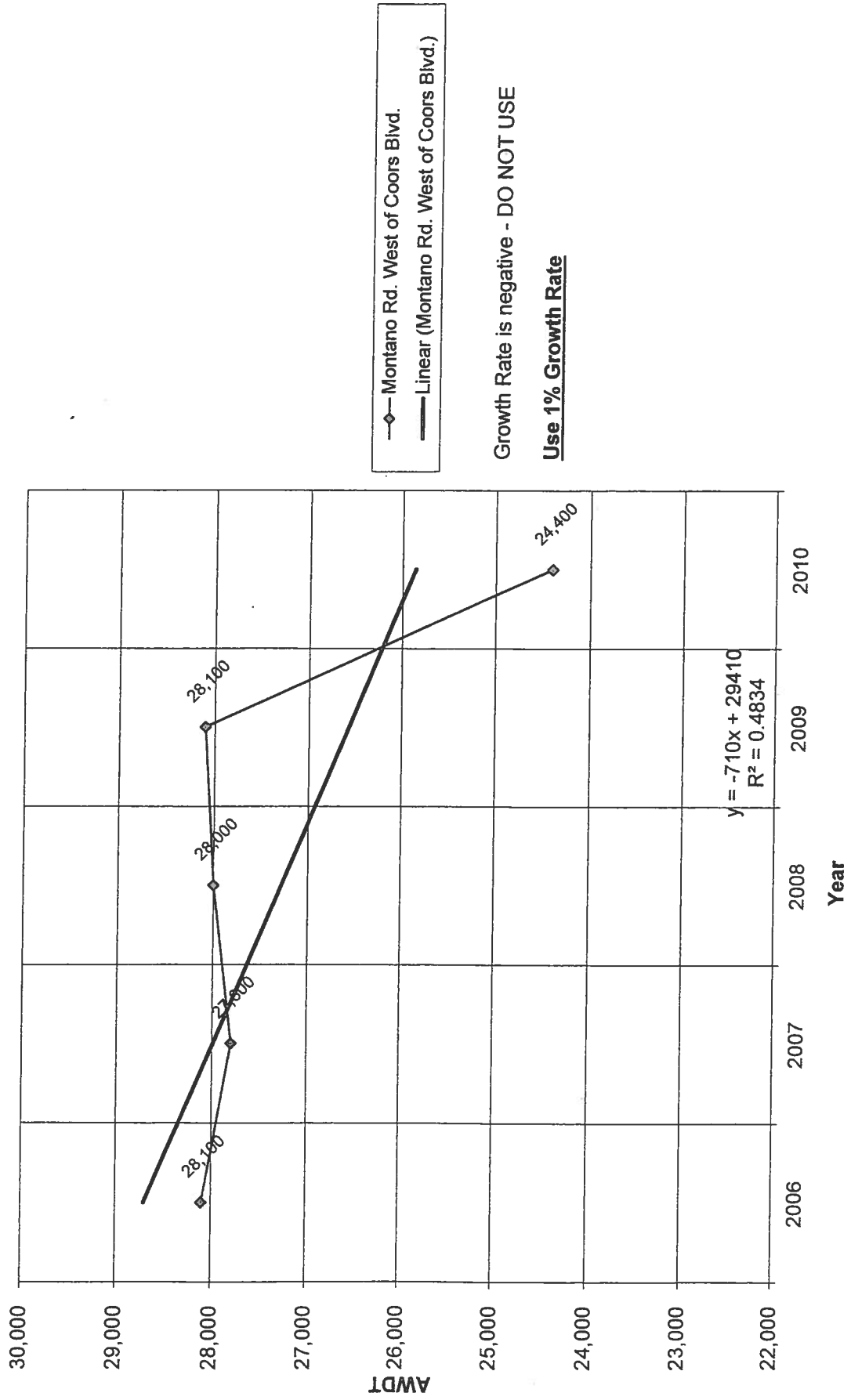
Andalucia, Tract 6 (Montano Rd. / Coors Blvd.)

Historic Growth Rate Table

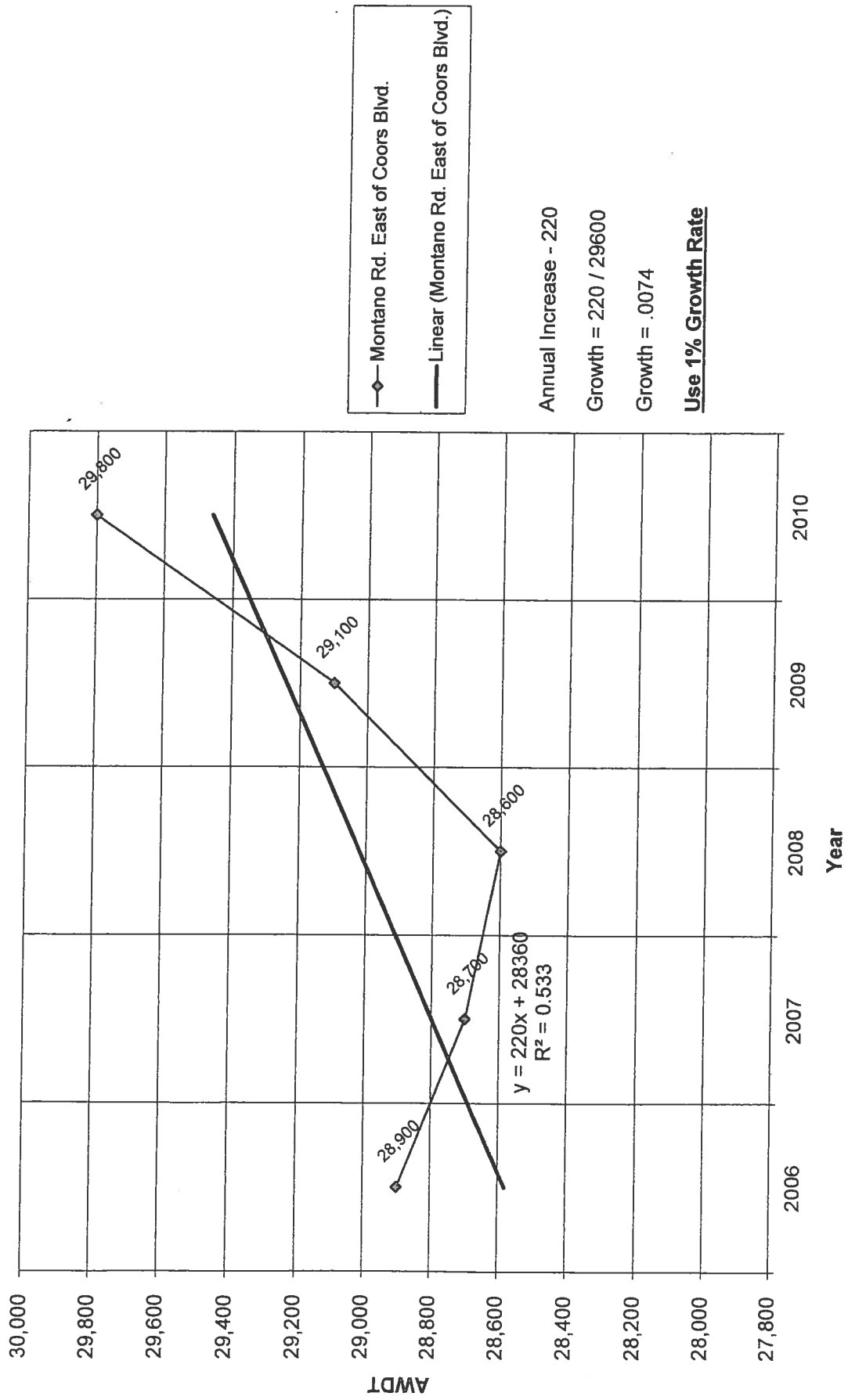
Traffic Flows from MRCOG Map

	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

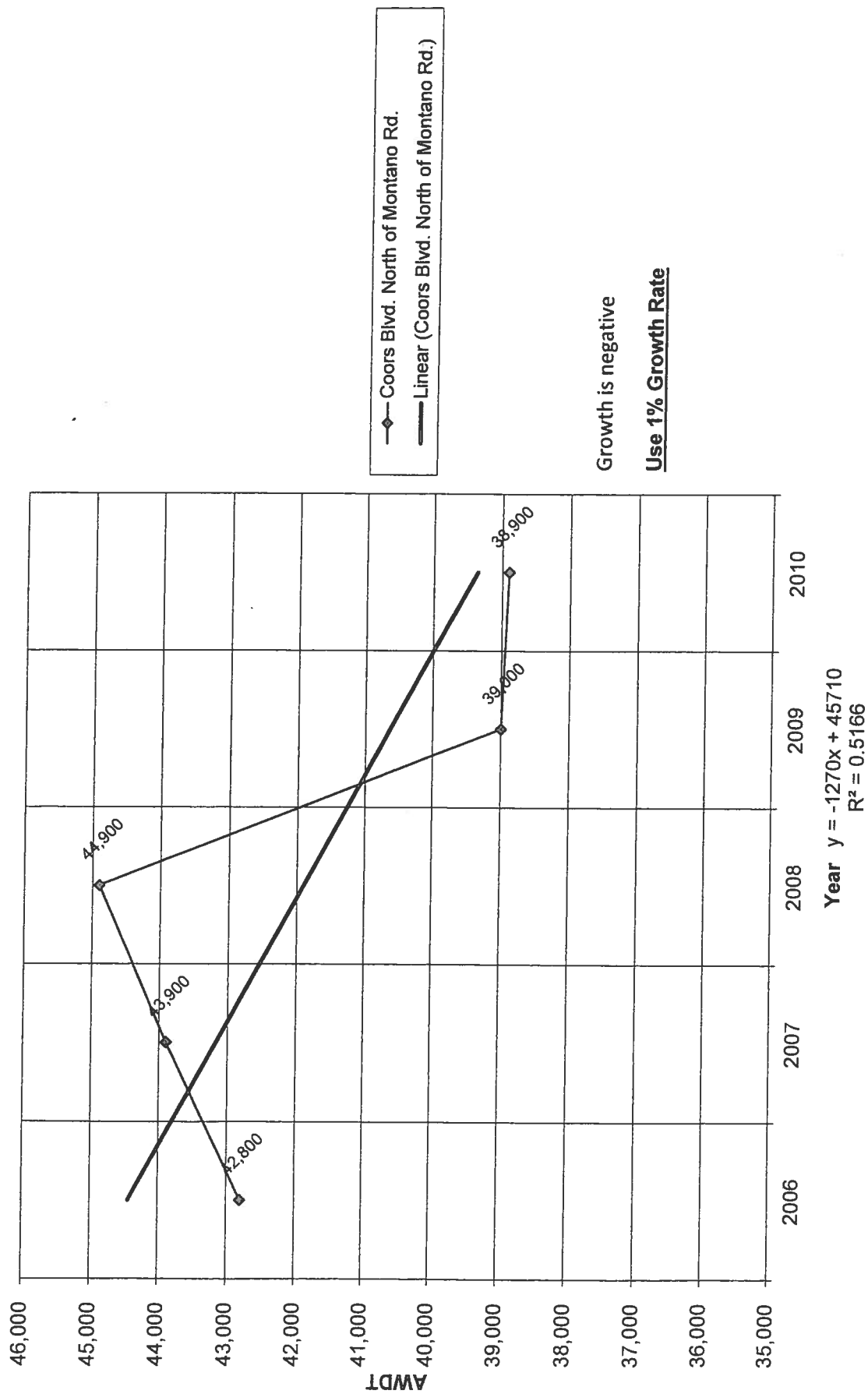
Historic Growth Chart Montano Rd. West of Coors Blvd. (2006-2010)



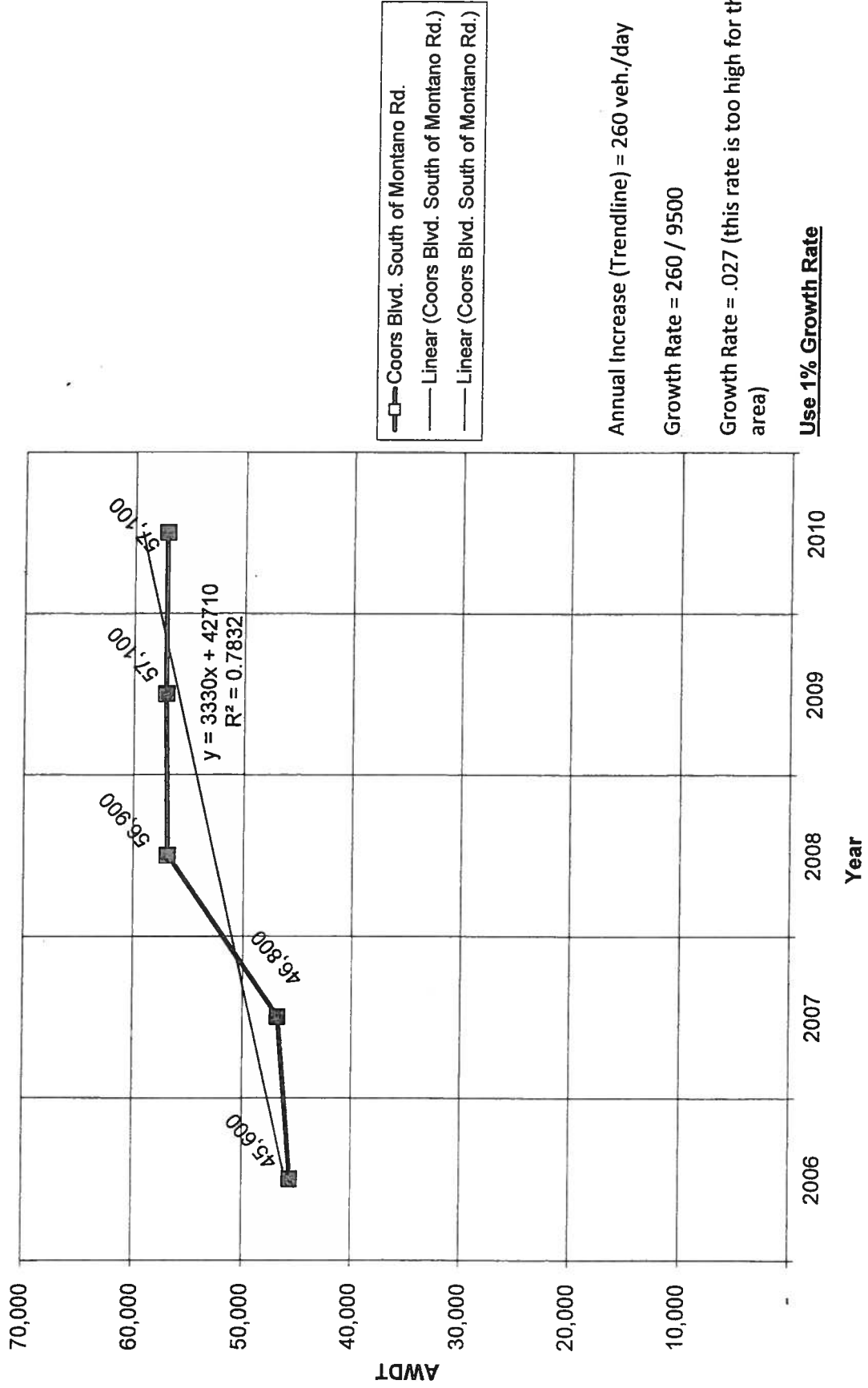
Historic Growth Chart Montano Rd. East of Coors Blvd.
(2006-2010)



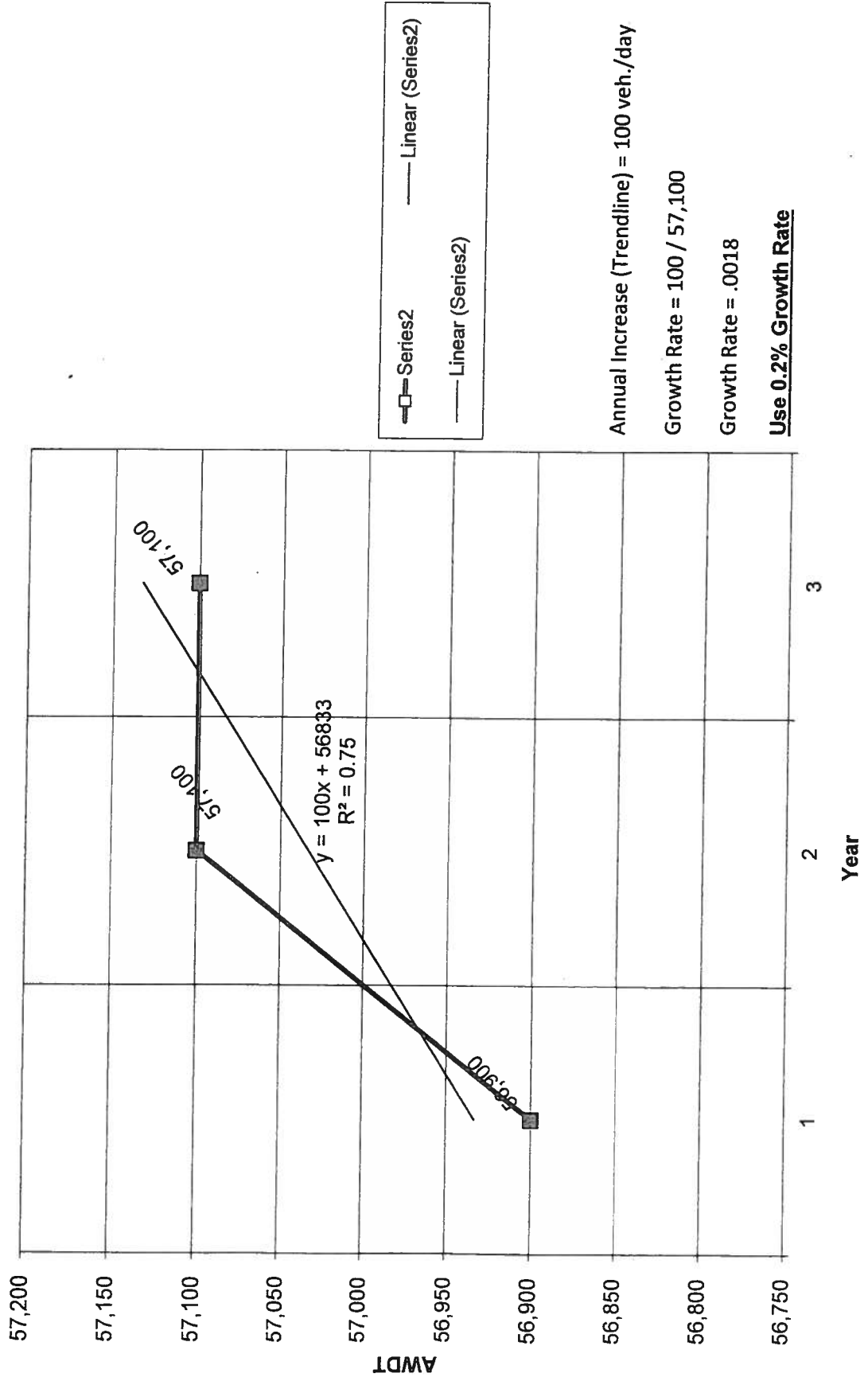
Historic Growth Chart Coors Blvd. North of Montano Rd. (2006-2010)



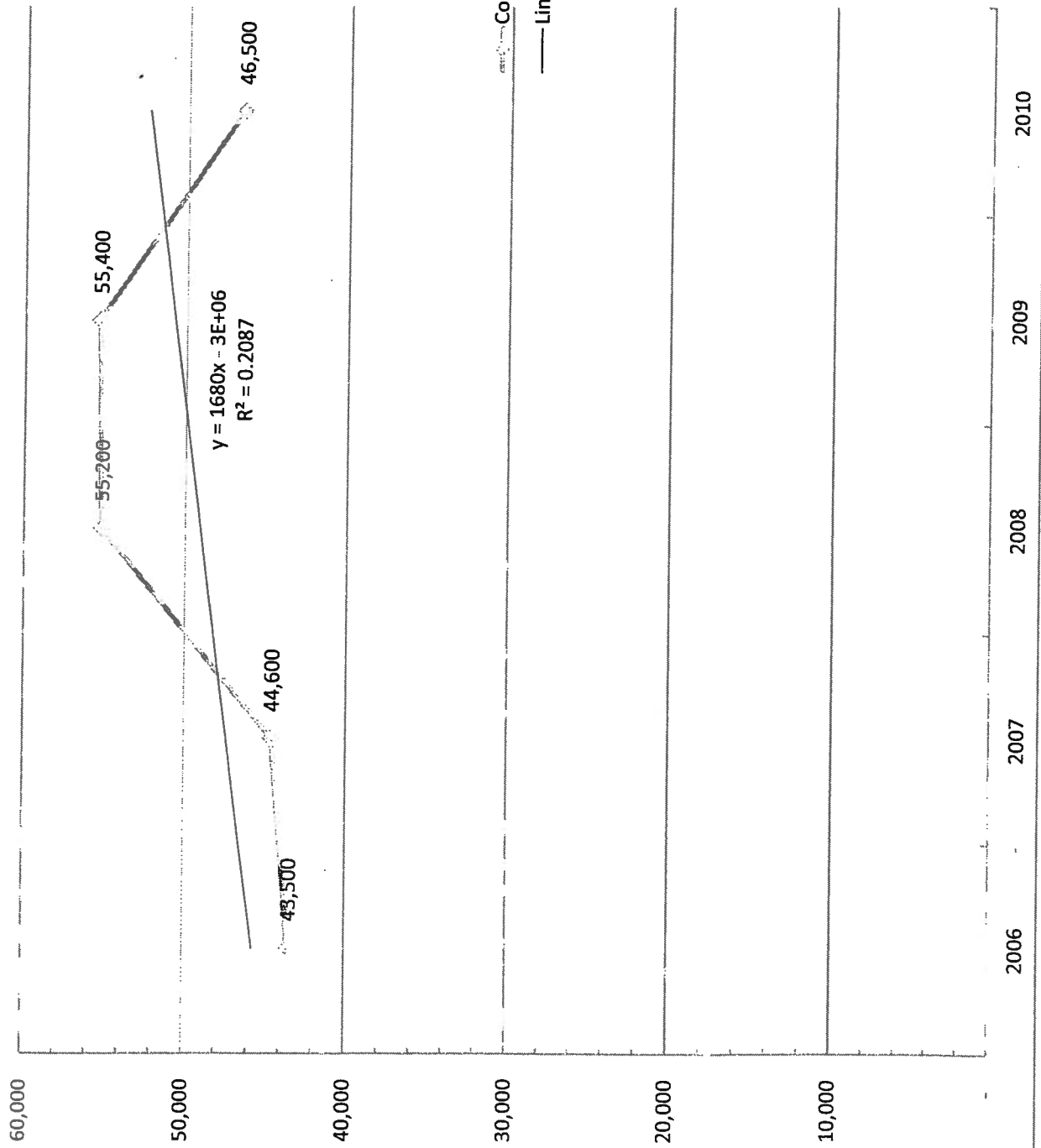
Historic Growth Chart Coors Blvd. North of Montano Rd. (2006-2010)



Historic Growth Chart Coors Blvd. North 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 / Antequera Rd

(9)	0.76			0.76			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	2,351	0	0	594	0	0	0	0	0	0	0	
	0	2,464	12	0	624	0	0	0	6	0	0	0	
2.0% Truck	0	2,425	102	0	642	0	0	0	55	0	0	0	
Existing (2011)													
2015 (NO BUILD - A.M.)													
2015 (BUILD - A.M.)													

	0.93			0.93			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	820	0	0	1,583	0	0	0	0	0	0	0	
	0	859	17	0	1,660	0	0	0	16	0	0	0	
Existing (2011)	0	838	153	0	1,694	0	0	0	112	0	0	0	
2015 (NO BUILD - P.M.)													
2015 (BUILD - P.M.)													

E-W Street / Coors Blvd

(10)	0.85			0.85			0.88			0.88			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	1,998	0	0	1,842	0	
	0	0	0	0	0	0	0	2,113	0	0	1,950	0	
2.0% Truck	0	0	0	0	0	69	0	2,164	50	0	2,027	0	
Existing (2011)													
2015 (NO BUILD - A.M.)													
2015 (BUILD - A.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	2,440	0	0	2,198	0	
	0	0	0	0	0	0	0	2,609	0	0	2,333	0	
Existing (2011)	0	0	0	0	0	225	0	2,703	132	0	2,516	0	
2015 (NO BUILD - P.M.)													
2015 (BUILD - P.M.)													

Mirandela Rd / Coors Blvd

(11)	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	1,998	0	0	1,842	0	
	0	0	0	0	0	10	0	2,104	0	10	1,940	0	
2.0% Truck	0	0	0	0	0	69	0	2,121	55	100	1,927	0	
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	2,440	0	0	2,198	0	
	0	0	0	0	0	26	0	2,583	0	14	2,318	0	
Existing (2011)	0	0	0	0	0	185	0	2,576	148	237	2,278	0	
2015 (NO BUILD - P.M.)													
2015 (BUILD - P.M.)													

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: **2011**
 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	11	53	14	11	10	7	12	54	30	30	63	1
Subtotal	245	1,160	314	241	226	155	264	1,178	652	652	1,375	12
Credit Union (Learning) Trips	0	12	12	1	0	0	15	5	0	0	7	0
Subtotal (NO BUILD - A.M.)	245	1,172	326	242	226	155	279	1,183	652	652	1,382	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%	8.95%	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	39	40	18	0	0	62	46	0	11	19	0
Total AM Peak Hour BUILD Volumes	245	1,211	366	260	226	155	341	1,229	652	663	1,401	12

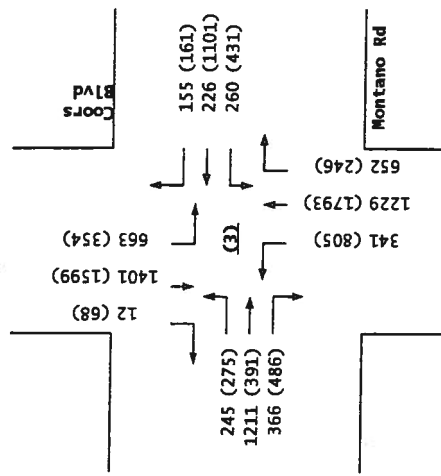
AM Adjustment for Heavy EB Flow on Montano

	20			20			20			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	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65
Background Traffic Growth	13	13	17	18	50	7	27	79	11	15	70	3
Subtotal	275	284	374	396	1,101	161	594	1,717	246	329	1,533	68
Credit Union (Learning) Trips	0	17	17	1	0	0	39	12	0	0	11	0
Subtotal (NO BUILD - P.M.)	275	301	391	397	1,101	161	633	1,729	246	329	1,544	68
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%	8.95%	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	90	95	34	0	0	172	64	0	25	55	0
Total PM Peak Hour BUILD Volumes	275	391	486	431	1,101	161	805	1,793	246	354	1,599	68

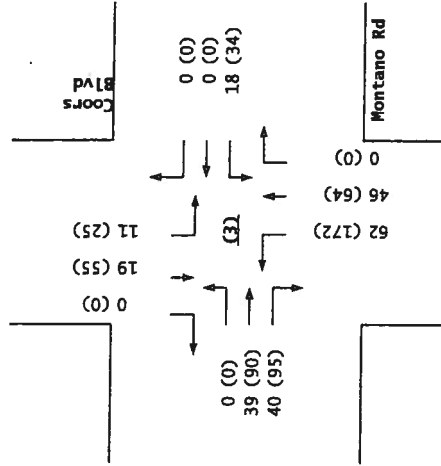
	Entering	Exiting	
Number of Residential Trips Generated	35	138	A.M. 100% Residential Development
	135	73	P.M.
Number of Commercial Trips Generated	157	130	A.M. 100% Commercial Development
	293	267	P.M.
Number of Walmart Store Trips Generated	85	49	A.M. 100% Walmart Store Development
	259	253	P.M.

	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2011 AM Peak Hr. Volumes	234	1,107	300	230	216	148	252	1,124	622	622	1,312	11
2011 PM Peak Hr. Volumes	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65

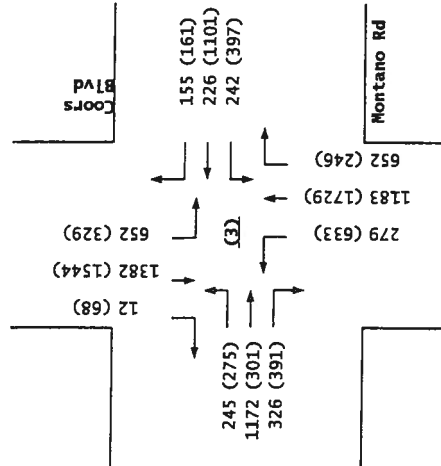
2015
BUILD



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%	10.99%	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	27	0	0	49	19	60	0	29	28	22	0	0
Total AM Peak Hour BUILD Volumes	269	39	296	138	32	78	62	1,722	116	74	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%	10.99%	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	61	0	0	89	57	32	0	71	75	52	0	0
Total PM Peak Hour BUILD Volumes	175	20	106	242	78	70	353	2,567	119	73	2,066	148

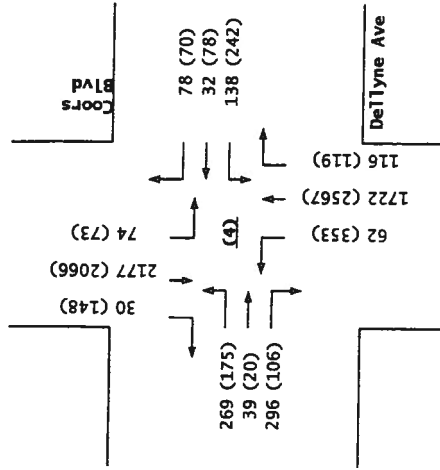
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	157	130	A.M.	100% Commercial Development
	293	267	P.M.	
Number of Walmart Store Trips Generated	85	49	A.M.	100% Walmart Store Development
	259	253	P.M.	

	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

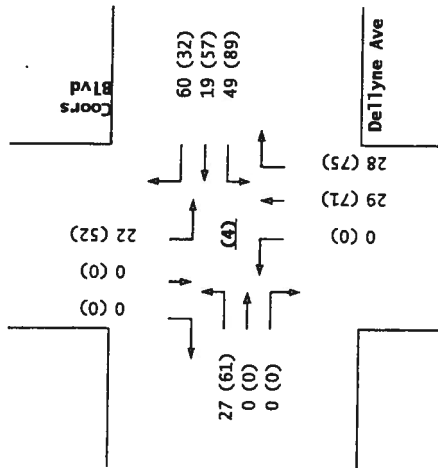
Pass-by Trip Calculations:

AM Pass-by Trips												
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
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	26	0	0	0	0	0	0	0	0
Net AM Passby Trips	0	0	0	26	0	0	0	0	0	0	0	0
PM Pass-by Trips												
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
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	87	0	0	0	0	0	0	0	0
Net PM Passby Trips	0	0	0	87	0	0	0	0	0	0	0	0
Pass-by Trips	131	97	AM	297	280	PM						

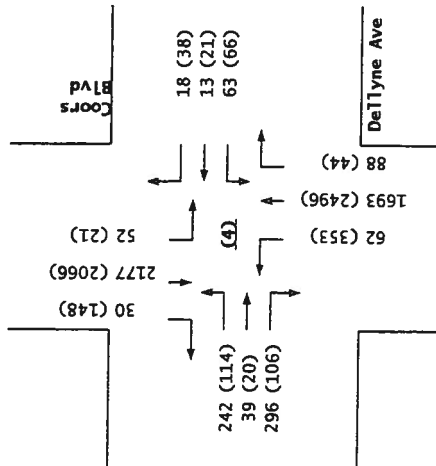
2015
BUILD



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**

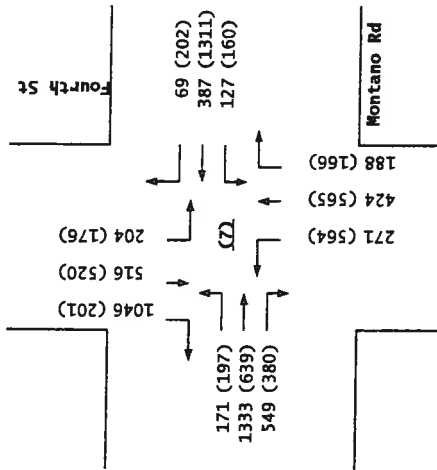
Growth Rates

	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 (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%
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	14	35	44	0	9	0	53	0	0	0	0	19
Total AM Peak Hour BUILD Volumes	171	1,333	549	127	387	69	271	424	188	204	516	1,046

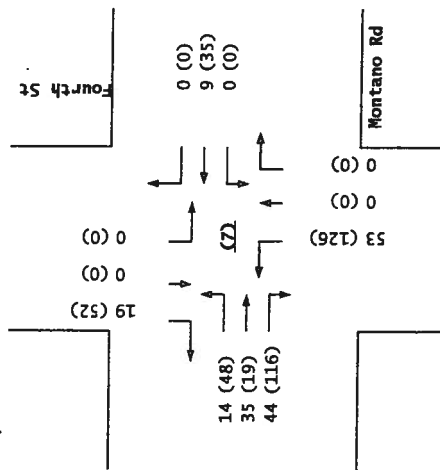
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	136	592	228	153	1,218	193	397	539	158	168	496	137
Background Traffic Growth	7	28	11	7	58	9	19	26	8	8	24	7
Subtotal	143	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%
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	48	19	116	0	35	0	126	0	0	0	0	52
Total PM Peak Hour BUILD Volumes	197	639	380	160	1,311	202	564	565	166	176	520	201

	Entering	Exiting		
Number of Residential Trips Generated	35	138	A.M.	100% Residential Development
	135	73	P.M.	
Number of Commercial Trips Generated	157	130	A.M.	100% Commercial Development
	293	267	P.M.	
Number of Walmart Store Trips Generated	85	49	A.M.	100% Walmart Store Development
	259	253	P.M.	

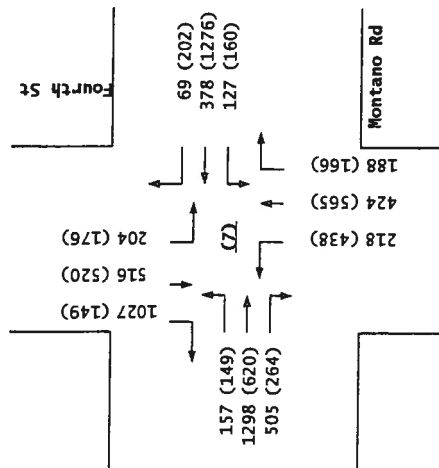
2015
BUILD



Trips



2015
NO 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

Existing Volumes

Background Traffic Growth

Subtotal

Credit Union (Leaming) 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 (Leaming) 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 Exiting

35 138 A.M.

100% Residential Development

Number of Commercial Trips Generated

135 73 P.M.

100% Commercial Development

Number of Walmart Store Trips Generated

167 130 A.M.

100% Walmart Store Development

293 267 P.M.

85 49 A.M.

259 253 P.M.

2011 AM Peak Hr. Volumes

2011 PM Peak Hr. Volumes

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	2050	30	73	417	51	0	0	55	0	0	29
57	736	15	46	1,368	326	0	0	46	0	0	69

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

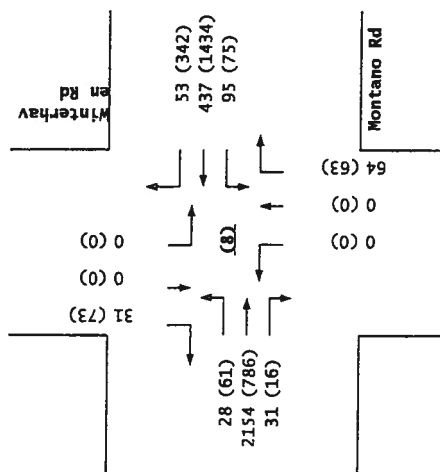
Net PM Passby Trips

Pass-by Trips

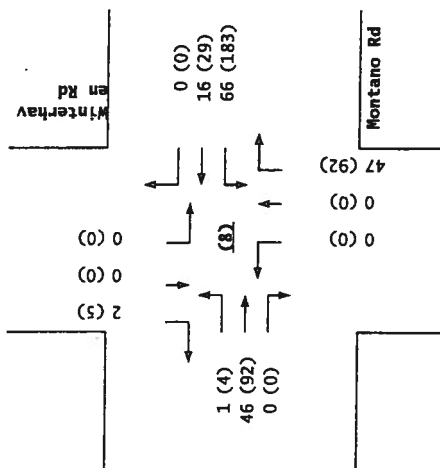
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	-35.00%	5.00%	9.00%	-9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-46	7	12	-12	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	34	0	0	0
0	-46	7	12	-12	0	0	0	34	0	0	0

Entering Exiting
 131 97 AM
 297 280 PM

2015
NO BUILD

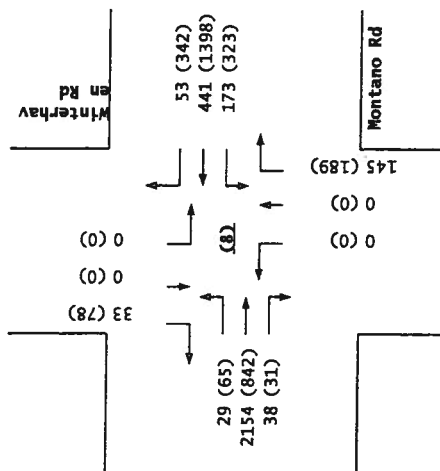


Trips



Montano Rd / Winterhaven Rd

2015
BUILD



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 2011

Implementation Year 2015

Growth Rates

	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	113	0	0	29	0	0	0	0	0	0	0
Subtotal	0	2,464	0	0	623	0	0	0	0	0	0	0
Credit Union (Learning) Trips	0	0	12	0	1	0	0	0	6	0	0	0
Subtotal (NO BUILD - A.M.)	0	2,464	12	0	624	0	0	0	6	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	51	0	18	0	0	0	49	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	0	2,464	63	0	642	0	0	0	55	0	0	0
Pass-by Trip Adjustments	0	-39	39	0	0	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	0	2,425	102	0	642	0	0	0	55	0	0	0

AM Adjustment for Heavy EB Flow on Montano

	20			20			20			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	820	0	0	1,583	0	0	0	0	0	0	0
Background Traffic Growth	0	39	0	0	76	0	0	0	0	0	0	0
Subtotal	0	859	0	0	1,659	0	0	0	0	0	0	0
Credit Union (Learning) Trips	0	0	17	0	1	0	0	0	16	0	0	0
Subtotal (NO BUILD - P.M.)	0	859	17	0	1,660	0	0	0	16	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	115	0	34	0	0	0	96	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	0	859	132	0	1,694	0	0	0	112	0	0	0
Pass-by Trip Adjustments	0	-21	21	0	0	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	0	838	153	0	1,694	0	0	0	112	0	0	0

	Entering	Exiting	
Number of Residential Trips Generated	35	138	A.M.
	136	73	P.M.
Number of Commercial Trips Generated	167	130	A.M.
	293	267	P.M.
Number of Walmart Store Trips Generated	85	49	A.M.
	269	253	P.M.

100% Commercial Development

100% Walmart Store Development

2011 AM Peak Hr. Volumes

2011 PM Peak Hr. Volumes

	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
	0	2351	0	0	594	0	0	0	0	0	0	0
	0	820	0	0	1,583	0	0	0	0	0	0	0

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%	0.00%
0	-39	39	0	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%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0	0
0	-39	39	0	0	0	0	0	0	0	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

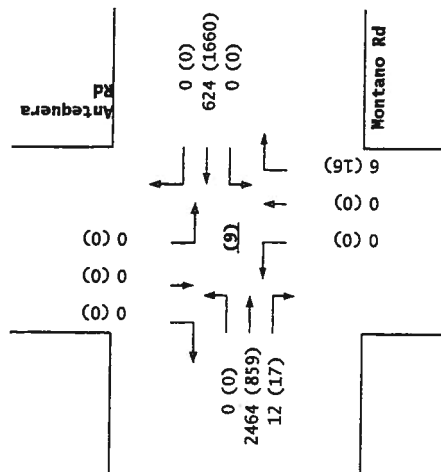
Volume Exiting

Net PM Passby Trips

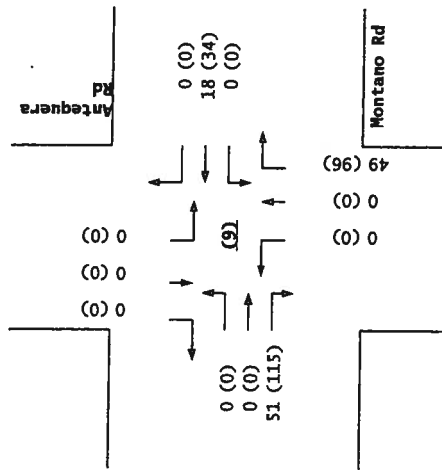
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
0.00%	-7.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-21	21	0	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	0	0	0	0	0
0	-21	21	0	0	0	0	0	0	0	0	0	0

	Entering	Exiting
Pass-by Trips	131	97 AM
	297	280 PM

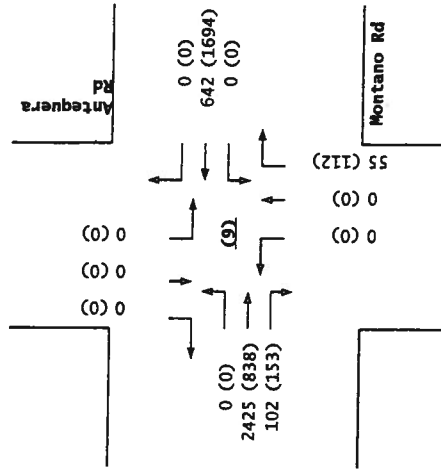
2015
NO BUILD



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 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)
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

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
0	0	0	0	0	0	0	1,998	0	0	1,842	0
0	0	0	0	0	0	0	96	0	0	88	0
0	0	0	0	0	0	0	2,094	0	0	1,930	0
0	0	0	0	0	0	0	19	0	0	20	0
0	0	0	0	0	0	0	2,113	0	0	1,950	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%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	0.00%	21.68%	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	50	0	59	25	0	77	0
0	0	0	0	0	60	0	2,172	25	0	2,027	0
0	0	0	0	0	19	0	-8	25	0	0	0
0	0	0	0	0	69	0	2,164	50	0	2,027	0

20

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

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	117	0	0	106	0
0	0	0	0	0	0	0	2,557	0	0	2,304	0
0	0	0	0	0	0	0	52	0	0	29	0
0	0	0	0	0	0	0	2,609	0	0	2,333	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%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	0.00%	21.68%	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	144	0	90	58	0	183	0
0	0	0	0	0	144	0	2,699	58	0	2,516	0
0	0	0	0	0	81	0	4	74	0	0	0
0	0	0	0	0	225	0	2,703	132	0	2,516	0

Number of Residential Trips Generated
Number of Commercial Trips Generated
Number of Walmart Store Trips Generated

Entering	Exiting	
35	138	A.M.
135	73	P.M.
157	130	A.M.
293	267	P.M.
85	49	A.M.
259	253	P.M.

100% Commercial Development
100% Walmart Store Development

2011 AM Peak Hr. Volumes
2011 PM Peak Hr. 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	1,998	0	0	1,842	0
0	0	0	0	0	0	0	2,440	0	0	2,198	0

Pass-by Trip Calculations:

AM Pass-by Trips
Percent Entering
Volume Entering
Percent Exiting
Volume Exiting
Net AM Passby Trips

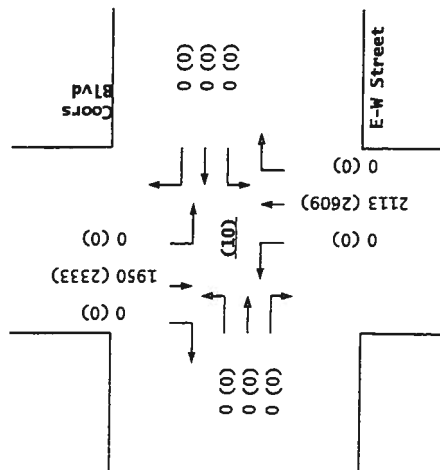
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	-25	25	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	19	0	17	0	0	0	0
0	0	0	0	0	19	0	-8	25	0	0	0

PM Pass-by Trips
Percent Entering
Volume Entering
Percent Exiting
Volume Exiting
Net PM Passby Trips

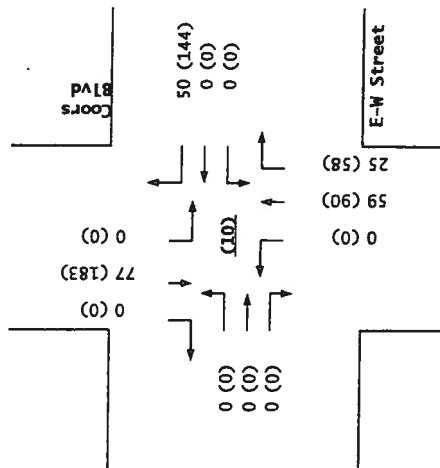
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	-74	74	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	29.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	0	0	81	0	78	0	0	0	0
0	0	0	0	0	81	0	4	74	0	0	0

Pass-by Trips
Entering 131
Exiting 97 AM
297 280 PM

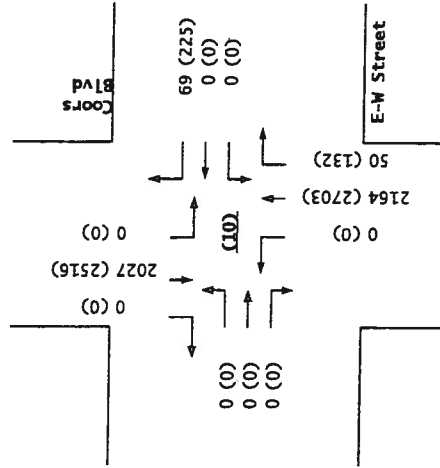
2015
NO BUILD



Trips



2015
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 2011

Implementation Year 2016

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	96	0	0	88	0
Subtotal	0	0	0	0	0	0	0	2,094	0	0	1,930	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	2,104	0	10	1,940	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%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	9.90%	21.68%	0.00%	0.00%
Percent Walmart Store 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	42	0	42	30	55	22	0
Subtotal AM Pk Hr. BUILD Volumes	0	0	0	0	0	52	0	2,146	30	65	1,962	0
Pass-by Trip Adjustments	0	0	0	0	0	17	0	-25	25	35	-35	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	69	0	2,121	55	100	1,927	0

AM Adjustment for Heavy EB Flow on Montano

	20			20			20			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	2,440	0	0	2,198	0
Background Traffic Growth	0	0	0	0	0	0	0	117	0	0	106	0
Subtotal	0	0	0	0	0	0	0	2,557	0	0	2,304	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	2,583	0	14	2,318	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%
Percent Walmart Store Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.90%	9.90%	21.68%	0.00%	0.00%
Percent Walmart Store 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	81	0	67	74	131	52	0
Subtotal PM Pk Hr. BUILD Volumes	0	0	0	0	0	107	0	2,650	74	145	2,370	0
Pass-by Trip Adjustments	0	0	0	0	0	78	0	-74	74	92	-92	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	185	0	2,576	148	237	2,278	0

Number of Residential Trips Generated	Entering	Exiting	
	35	138	A.M.
	135	73	P.M.
Number of Commercial Trips Generated	157	130	A.M. 100% Commercial Development
	293	267	P.M.
Number of Walmart Store Trips Generated	85	49	A.M. 100% Walmart Store Development
	259	253	P.M.

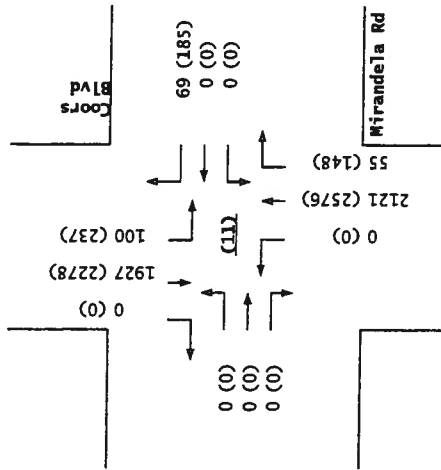
2011 AM Peak Hr. Volumes
2011 PM Peak Hr. Volumes

	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	0	0	0	0	0	0	0	1,998	0	0	1,842	0
	0	0	0	0	0	0	0	2,440	0	0	2,198	0

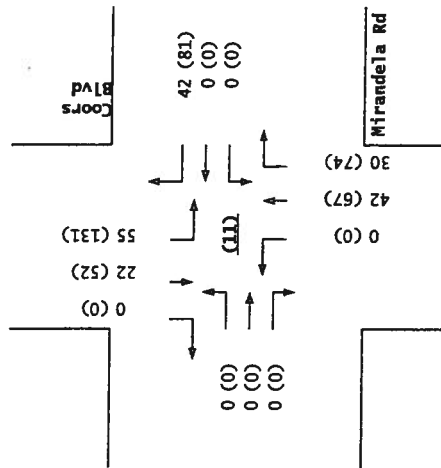
Pass-by Trip Calculations:

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	-25	25	35	-35	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	17	0	0	0	0	0	0
Net AM Passby Trips	0	0	0	0	0	17	0	-25	25	35	-35	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	-74	74	92	-92	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	78	0	0	0	0	0	0
Net PM Passby Trips	0	0	0	0	0	78	0	-74	74	92	-92	0
Pass-by Trips	Entering	Exiting										
	131	97	AM									
	297	280	PM									

2015
BUILD

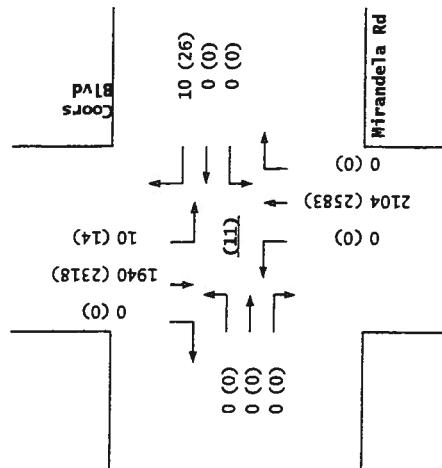


Trips



Mirandela Rd / Coors Blvd

2015
NO BUILD



Timings

3: Montano Rd & Coors Blvd

Terry O. Brown, PE
11/2/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	11	11	11	11	11	11	11	11	11	11
Volume (vph)	245	1172	326	242	226	279	1183	652	652	1382	12
Turn Type	Prot	7	4	5	3	8	5	2	3	1	8
Permitted Phases	Prot	7	4	5	3	8	5	2	3	1	8
Permitted Phases	Prot	7	4	5	3	8	5	2	3	1	8
Detector Phase	7	4	5	3	8	5	2	3	1	8	6
Switch Phase	7	4	5	3	8	5	2	3	1	8	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	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Total Split (s)	22.0	42.0	16.0	19.0	39.0	15.0	35.0	19.0	24.0	44.0	22.0
Total Split (%)	18.3%	35.0%	12.5%	15.9%	32.5%	12.5%	28.2%	15.8%	20.0%	36.7%	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
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	Lead	Lag	Lead
Lead-Lag Optimize?	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	15.2	37.0	52.0	14.0	35.8	10.0	30.0	48.0	19.0	39.0	59.2
Actuated g/C Ratio	0.13	0.31	0.43	0.12	0.30	0.08	0.25	0.41	0.16	0.32	0.49
Clearance Time (s)	0.71	1.23	0.54	0.80	0.46	1.12	1.07	1.16	1.35	0.94	0.02
Control Delay	59.7	149.2	28.1	67.6	26.0	134.9	68.5	108.4	207.0	51.4	6.8
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	59.7	149.2	28.1	67.6	26.0	134.9	68.5	108.4	207.0	51.4	6.8
LOS	E	F	C	E	C	F	E	F	F	D	A
Approach Delay	113.2	F	F	42.1	D	F	F	F	F	100.7	F
Approach LOS	F	F	F	D	D	F	F	F	F	F	F
Intersection Summary											
Cycle Length: 120											
Actuated Cycle Length: 120											
Offset: 86 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Green											
Natural Cycle: 130											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 1.35											
Intersection Signal Delay: 93.9											
Intersection Capacity Utilization 103.9%											
Analysis Period (min) 15											

Splits and Phases: 3: Montano Rd & Coors Blvd



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
11/2/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	11	11	11	11	11	11	11	11	11	11
Volume (vph)	245	1172	326	242	226	279	1183	652	652	1382	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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 (vphpl)	3400	3505	1568	3400	3291	3400	5038	1568	3400	5038	1568
Satd. Flow (vphpl)	3400	3505	1568	3400	3291	3400	5038	1568	3400	5038	1568
Peak-hour factor, PHF	0.80	0.88	0.88	0.76	0.76	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	306	1332	370	318	297	304	317	1344	741	724	1536
RTOR Reduction (vph)	0	0	5	0	100	0	0	0	0	0	0
Lane Group Flow (vph)	Prot	7	4	5	3	8	5	2	3	1	8
Turn Type	Prot	7	4	5	3	8	5	2	3	1	8
Protected Phases	Prot	7	4	5	3	8	5	2	3	1	8
Permitted Phases	Prot	7	4	5	3	8	5	2	3	1	8
Actuated Green, G (s)	15.2	37.0	47.0	14.0	35.8	10.0	30.0	44.0	19.0	39.0	54.2
Effective Green, g (s)	15.2	37.0	47.0	14.0	35.8	10.0	30.0	44.0	19.0	39.0	54.2
Actuated g/C Ratio	0.13	0.31	0.39	0.12	0.30	0.08	0.25	0.37	0.16	0.32	0.49
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 Group Cap (vph)	431	1081	679	397	982	263	1259	640	538	1637	774
v/c Ratio Prot	0.09	0.38	0.04	0.09	0.12	0.09	0.27	0.13	0.21	0.31	0.00
v/c Ratio	0.71	1.23	0.54	0.80	0.41	1.12	1.07	1.16	1.35	0.94	0.01
Uniform Delay, d1	50.3	41.5	28.1	51.5	33.8	55.0	45.0	38.0	50.5	39.3	18.1
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	5.3	112.7	0.8	11.0	0.3	76.5	39.7	79.9	167.7	11.7	0.0
Delay (s)	55.6	154.2	28.9	62.7	33.9	131.5	84.7	107.2	218.2	51.1	18.1
Level of Service	E	F	C	E	C	F	F	F	F	D	B
Approach Delay (s)	116.1	F	F	45.1	D	F	F	F	F	104.1	F
Approach LOS	F	F	F	D	D	F	F	F	F	F	F
Intersection Summary											
HCM Average Control Delay	96.3										
HCM Volume to Capacity ratio	1.16										
Actuated Cycle Length (s)	120.0										
Intersection Capacity Utilization	103.9%										
Analysis Period (min)	15										
c Critical Lane Group											

2015 AM Peak NOBUILD Conditions

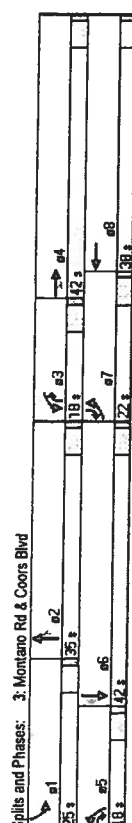
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Existing Geometry

Timings 3: Montano Rd & Coors Blvd

Terry O. Brown, PE
11/4/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	245	1211	366	260	226	341	1229	652	663	1401	12
Volume (vph)	7	4	5	3	8	5	2	3	1	6	7
Turn Type	Prot	pm-ov	pm-ov	Prot	Prot	pm-ov	pm-ov	Prot	Prot	pm-ov	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	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	10.0	10.0	21.0	10.0
Minimum Split (s)	22.0	42.0	18.0	18.0	38.0	18.0	35.0	18.0	25.0	42.0	22.0
Total Split (%)	18.3%	35.0%	15.0%	15.0%	31.7%	15.0%	29.2%	15.0%	20.8%	35.0%	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
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	Lead	Lag	Lead
Lead-Lag Optimize?	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	15.2	37.0	55.0	13.0	34.6	13.0	30.0	48.0	20.0	37.0	57.2
Actuated g/C Ratio	0.13	0.31	0.46	0.11	0.29	0.11	0.25	0.40	0.17	0.31	0.48
v/c Ratio	0.71	1.27	0.58	0.93	0.46	1.05	1.11	0.67	1.30	1.00	0.02
Control Delay	59.7	165.9	27.6	85.4	26.6	124.3	89.9	19.6	167.6	65.1	7.2
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	59.7	165.9	27.6	85.4	26.6	124.3	89.9	19.6	167.6	65.1	7.2
LOS	E	F	C	F	D	F	F	B	F	E	A
Approach Delay	122.9	F	C	F	D	F	F	B	F	E	A
Approach LOS	F	F	C	F	D	F	F	B	F	E	A

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 73 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 93.7
Intersection LOS: F
Analysis Period (min) 15
ICU Level of Service G



2015 AM Peak BUILD Conditions
Existing Geometry
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HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd

Terry O. Brown, PE
11/4/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	245	1211	366	260	226	341	1229	652	663	1401	12
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Total Lost time (s)	0.97	0.95	1.00	0.97	0.95	0.97	0.91	0.88	0.97	0.91	1.00
Lane Util. Factor	1.00	1.00	0.85	1.00	0.94	1.00	1.00	0.85	1.00	0.95	1.00
Flt Protected	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Satd. Flow (prot)	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Flt Permitted	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Satd. Flow (perm)	0.80	0.88	0.88	0.76	0.76	0.88	0.88	0.88	0.80	0.88	0.80
Peak-hour factor, PHF	306	1376	416	342	297	388	1397	741	737	1557	13
Adj. Flow (vph)	0	0	3	0	100	0	0	3	0	0	7
RTOR Reduction (vph)	306	1376	416	342	297	388	1397	741	737	1557	13
Lane Group Flow (vph)	Prot	7	4	5	3	8	5	2	3	1	6
Turn Type	Prot	pm-ov	pm-ov	Prot	Prot	pm-ov	pm-ov	Prot	Prot	pm-ov	pm-ov
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	15.2	37.0	50.0	13.0	34.6	13.0	30.0	43.0	20.0	37.0	52.2
Effective Green, g (s)	15.2	37.0	50.0	13.0	34.6	13.0	30.0	43.0	20.0	37.0	52.2
Actuated g/C Ratio	0.13	0.31	0.42	0.11	0.29	0.11	0.25	0.36	0.17	0.31	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)	431	1081	719	368	954	368	1259	1104	567	1553	747
v/s Ratio Prot	0.09	0.39	0.06	0.10	0.12	0.11	0.28	0.07	0.22	0.31	0.00
v/c Ratio Perm	0.71	1.27	0.57	0.93	0.42	1.05	1.11	0.67	1.30	1.00	0.01
Uniform Delay, d1	50.3	41.5	26.6	53.0	34.4	53.5	45.0	32.5	50.0	41.5	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.44	0.72	0.58	1.00	1.00	1.00
Incremental Delay, d2	5.3	130.1	1.1	28.2	0.3	53.6	57.7	1.1	147.5	23.5	0.0
Delay (s)	55.6	171.6	28.0	82.3	34.7	130.9	90.4	20.0	197.5	65.0	19.2
Level of Service	E	F	C	F	D	F	F	C	F	E	B
Approach Delay (s)	126.2	F	C	F	D	54.0	E	F	F	E	B
Approach LOS	F	F	C	F	D	E	E	F	F	E	B

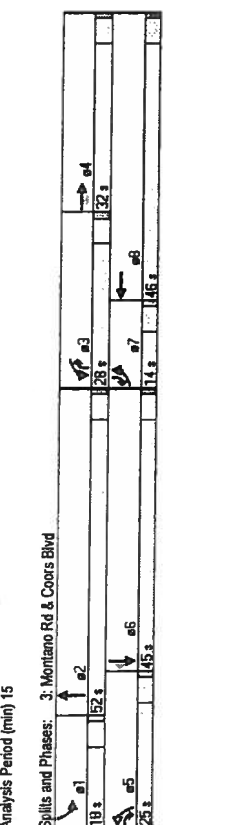
Intersection Summary
HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
Intersection Capacity Utilization
Analysis Period (min)
c Critical Lane Group

96.4
1.13
120.0
100.2%
15
F
G
15.0

2015 AM Peak BUILD Conditions
Existing Geometry
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Timings 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/2/2011

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)	275	301	391	397	1101	633	1729	246	329	1544	68
Turn Type	Prot	pm-ov	pm-ov	Prot	Prot	Prot	pm-ov	pm-ov	Prot	pm-ov	pm-ov
Permitted Phases	7	4	5	3	8	5	2	3	1	8	7
Predicted 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)	14.0	32.0	25.0	28.0	46.0	25.0	28.0	18.0	45.0	14.0	14.0
Total Split (%)	10.8%	24.6%	19.2%	21.5%	35.4%	19.2%	21.5%	13.8%	34.6%	10.8%	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 Adjunct (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 Eff Green (s)	9.0	29.4	54.4	20.6	41.0	20.6	41.0	72.6	13.0	40.0	54.0
Actuated g/C Ratio	0.07	0.23	0.42	0.16	0.32	0.16	0.32	0.56	0.10	0.31	0.42
v/c Ratio	1.25	0.42	0.64	0.79	1.24	0.79	1.24	0.99	0.28	1.08	0.91
Control Delay	189.7	45.5	35.2	72.0	153.0	169.5	42.0	7.0	118.8	91.4	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	189.7	45.5	35.2	72.0	153.0	169.5	42.0	7.0	118.8	91.4	22.4
LOS	F	D	D	E	F	F	D	A	F	F	C
Approach Delay	81.4										
Approach LOS	F										



2015 PM Peak NOBUILD Conditions
Existing Geometry
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HCM Signalized Intersection Capacity Analysis 3: Montano Rd & Coors Blvd Terry O. Brown, PE 11/2/2011

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)	275	301	391	397	1101	633	1729	246	329	1544	68
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	0.95	1.00
Satd. Flow (pm)	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.85	1.00	0.95	1.00
Flt Permitted	3400	3506	1568	3400	3438	3400	5038	1568	3400	5038	1568
Satd. Flow (pm)	3400	3506	1568	3400	3438	3400	5038	1568	3400	5038	1568
Peak-hour factor, PHF	0.94	0.91	0.91	0.93	0.93	0.93	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	283	331	430	427	1184	173	659	1801	256	358	1678
RTOR Reduction (vph)	0	0	9	0	9	0	0	0	45	0	3
Lane Group Flow (vph)	283	331	421	427	1348	0	659	1801	211	358	1678
Turn Type	Prot	pm-ov	pm-ov	Prot	Prot	Prot	pm-ov	pm-ov	Prot	pm-ov	pm-ov
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	8.0	28.4	48.4	20.6	41.0	20.6	41.0	67.6	13.0	40.0	48.0
Effective Green, g (s)	9.0	29.4	49.4	20.6	41.0	20.6	41.0	67.6	13.0	40.0	48.0
Actuated g/C Ratio	0.07	0.23	0.38	0.16	0.32	0.16	0.32	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	793	656	539	1084	523	1821	876	340	1550	651
v/s Ratio Prot	cd09	0.09	0.10	0.13	cd39	cd19	0.36	0.04	0.11	cd33	0.91
v/s Ratio Perm			0.17					0.10			0.04
Uniform Delay, d1	1.25	0.42	0.64	0.79	1.24	1.25	0.98	0.24	1.05	1.08	0.11
Progression Factor	60.5	43.0	33.1	52.6	44.5	55.0	41.2	17.1	56.5	45.0	28.3
Incremental Delay, d2	1.00	1.00	1.00	1.17	0.98	0.97	0.66	0.73	1.00	1.00	1.00
Delay (s)	141.4	0.4	2.2	7.3	117.1	126.3	13.9	0.1	63.4	48.8	0.1
Level of Service	F	D	D	E	F	F	D	B	F	F	C
Approach Delay (s)	84.1										
Approach LOS	F										

Intersection Summary											
HCM Average Control Delay	95.7										
HCM Volume to Capacity ratio	1.19										
Actuated Cycle Length (s)	130.0										
Intersection Capacity Utilization	100.0%										
Analysis Period (min)	15										
c Critical Lane Group											

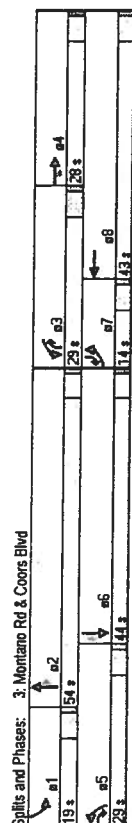
2015 PM Peak NOBUILD Conditions
Existing Geometry
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Timings

3: Montano Rd & Coors Blvd Terry O. Brown, PE
11/3/2011 - 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)	275	391	466	431	1101	805	1793	246	354	1599	68
Turn Type	Prot	pm+ov	pm+ov	Prot	Prot	Prot	pm+ov	pm+ov	Prot	pm+ov	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											
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)	14.0	28.0	29.0	29.0	43.0	29.0	54.0	28.0	19.0	44.0	14.0
Total Split (%)	10.8%	21.5%	22.3%	22.3%	33.1%	22.3%	41.5%	22.3%	14.5%	33.8%	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	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Eff Green (s)	9.0	25.1	54.1	21.9	38.0	24.0	49.0	75.9	14.0	39.0	53.0
Actuated g/C Ratio	0.07	0.19	0.42	0.17	0.29	0.18	0.38	0.58	0.11	0.30	0.41
W/C Ratio	1.25	0.64	0.81	0.81	1.34	1.34	0.98	0.16	1.05	1.15	0.12
Control Delay	189.7	53.7	44.5	46.1	191.6	197.1	44.5	9.0	116.3	116.9	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.7	63.7	44.5	46.1	191.6	197.1	44.5	9.0	116.3	116.9	23.6
LOS	F	D	D	D	F	F	D	A	F	F	C
Approach Delay	81.5				154.6						
Approach LOS	F				F						

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 78 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum W/C Ratio: 1.34
Intersection Signal Delay: 107.4
Intersection Capacity Utilization 113.9%
Analysis Period (min) 15
Intersection LOS: F
ICU Level of Service H



2015 PM Peak BUILD Conditions

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HCM Signalized Intersection Capacity Analysis
3: Montano Rd & Coors Blvd Terry O. Brown, PE
11/3/2011 - 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)	275	391	466	431	1101	805	1793	246	354	1599	68
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3438	3400	5036	2760	3400	6036	1668
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	3438	3400	5036	2760	3400	6036	1668
Peak-hour factor, PHF	0.94	0.91	0.91	0.93	0.93	0.96	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	293	430	534	463	1184	839	1868	256	385	1736	74
RTOR Reduction (vph)	0	0	7	0	9	0	0	0	23	0	2
Lane Group Flow (vph)	293	430	527	463	1348	0	839	1868	233	385	1738
Turn Type	Prot	pm+ov	pm+ov	Prot	Prot	Prot	pm+ov	pm+ov	Prot	pm+ov	pm+ov
Permitted Phases	7	4	5	3	8	5	2	3	1	6	7
Actuated Green, G (s)	9.0	25.1	48.1	21.9	38.0	24.0	49.0	70.9	14.0	39.0	48.0
Effective Green, g (s)	9.0	25.1	48.1	21.9	38.0	24.0	49.0	70.9	14.0	39.0	48.0
Actuated g/C Ratio	0.07	0.19	0.38	0.17	0.28	0.18	0.38	0.55	0.11	0.30	0.37
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	677	653	573	1005	628	1898	1611	366	1511	639
v/s Ratio Prot	c0.09	0.12	0.15	0.14	c0.39	c0.25	0.37	0.02	0.11	c0.35	0.01
v/s Ratio Perm											
v/c Ratio	1.25	0.64	0.81	0.81	1.34	1.34	0.98	0.14	1.05	1.15	0.11
Uniform Delay, d1	60.5	48.2	36.2	52.0	46.0	53.0	40.1	14.6	58.0	45.5	27.0
Progression Factor	1.00	1.00	1.00	0.77	0.97	0.91	0.75	0.92	1.00	1.00	1.00
Incremental Delay, d2	141.4	2.0	7.2	4.4	157.1	158.8	14.0	0.0	61.3	75.7	0.1
Delay (s)	201.9	50.2	43.4	44.3	201.5	208.9	44.0	13.5	119.3	121.2	27.1
Level of Service	F	D	D	D	F	F	D	B	F	F	C
Approach Delay (s)	82.7				161.5						
Approach LOS	F				F						

Intersection Summary
HCM Average Control Delay 111.2 HCM Level of Service F
HCM Volume to Capacity ratio 1.26
Actuated Cycle Length (s) 130.0 Sum of lost time (s) 20.0
Intersection Capacity Utilization 113.9% ICU Level of Service H
Analysis Period (min) 15
Critical Lane Group

2015 PM Peak BUILD Conditions

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Timings

4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/2/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	242	39	256	63	13	18	62	183	68	52	2177	30
Volume (vph)	242	39	256	63	13	18	62	183	68	52	2177	30
Turn Type	Prot	7	4	Prot	3	8	5	2	Perm	Prot	1	6
Protected Phases												
Permitted Phases												
Detector Phase												
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	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	21.0
Yellow Time (s)	27.0	34.0	34.0	14.0	21.0	21.0	10.0	61.0	11.0	62.0	62.0	62.0
Total Split (%)	22.5%	28.3%	28.3%	11.7%	17.5%	17.5%	8.3%	50.8%	9.2%	51.7%	51.7%	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	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	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Elct Green (s)	22.0	26.6	26.6	8.6	13.2	13.2	63.9	58.3	58.3	6.5	59.3	59.3
Actuated g/C Ratio	0.18	0.22	0.22	0.07	0.11	0.11	0.53	0.49	0.49	0.05	0.49	0.49
v/c Ratio	1.01	0.13	0.91	0.67	0.08	0.12	0.52	0.82	0.13	0.61	0.88	0.04
Control Delay	101.0	36.9	58.4	79.5	46.8	18.2	28.1	30.6	6.4	79.3	29.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	101.0	36.9	58.4	79.5	46.8	18.2	28.1	30.6	6.4	79.3	29.0	4.1
LOS	F	D	E	E	D	B	C	C	A	E	C	A
Approach Delay	74.8											
Approach LOS	E											

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: 36.5
Intersection Capacity Utilization: 78.6%
Analysis Period (min): 15
Intersection LOS: D
ICU Level of Service: D



2015 AM Peak NOBUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis

4: Dellyne Ave & Coors Blvd
Terry O. Brown, PE
11/2/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	242	39	256	63	13	18	62	183	68	52	2177	30
Volume (vph)	242	39	256	63	13	18	62	183	68	52	2177	30
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	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	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1845	1568
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1845	1568
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	323	52	386	84	17	24	74	2015	105	58	2446	34
RTOR Reduction (vph)	0	0	86	0	0	21	0	0	41	0	0	13
Lane Group Flow (vph)	323	52	309	84	17	3	74	2015	64	58	2446	21
Turn Type	Prot	7	4	Prot	3	6	5	2	Perm	Prot	1	6
Protected Phases												
Permitted Phases												
Actuated Green, G (s)	22.0	26.6	26.6	8.6	13.2	13.2	63.8	58.3	58.3	6.5	59.3	59.3
Effective Green, g (s)	22.0	26.6	26.6	8.6	13.2	13.2	63.8	58.3	58.3	6.5	59.3	59.3
Actuated g/C Ratio	0.18	0.22	0.22	0.07	0.11	0.11	0.53	0.49	0.49	0.05	0.49	0.49
Clearance Time (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
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)	321	408	348	126	203	172	142	2447	762	95	2489	775
v/s Ratio Prot	c0.18	0.03		0.05	0.01		0.02	0.40		c0.03	c0.49	
v/c Ratio Perm	1.01	0.13	0.89	0.67	0.08	0.02	0.52	0.82	0.04	0.04	0.88	0.01
Uniform Delay, d1	49.0	37.4	45.2	54.3	48.0	47.6	26.5	26.4	16.5	55.5	29.8	15.6
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	51.8	0.1	22.7	12.5	0.2	0.0	3.4	3.3	0.2	7.4	11.1	0.0
Delay (s)	100.8	37.5	67.9	66.9	48.1	47.6	29.9	29.7	16.8	68.5	26.9	8.1
Level of Service	F	D	E	E	D	D	C	C	B	E	C	A
Approach Delay (s)	79.7											
Approach LOS	E											

Intersection Summary
HCM Average Control Delay: 38.1
HCM Volume to Capacity ratio: 0.89
Actuated Cycle Length (s): 120.0
Intersection Capacity Utilization: 78.6%
Analysis Period (min): 15
Critical Lane Group: c

2015 AM Peak NOBUILD Conditions

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Existing Geometry

Timings

4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/3/2011 - 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)	269	39	138	32	76	62	1722	116	74
Turn Type	Prot	Prot	Prot	Perm	Perm	Perm	Prot	Prot	Perm
Protected Phases	7	4	3	8	8	2	2	1	6
Permitted Phases	7	4	3	8	8	2	2	1	6
Detector Phase	7	4	3	8	8	2	2	1	6
Switch Phase	7	4	3	8	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	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	34.0	10.0	22.0	10.0	66.0	10.0	66.0	66.0
Total Split (%)	18.3%	28.3%	8.3%	18.3%	8.3%	55.0%	8.3%	55.0%	55.0%
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?	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effect Green (s)	16.1	29.0	5.0	17.9	66.0	61.0	5.0	61.0	61.0
Actuated g/C Ratio	0.13	0.24	0.04	0.15	0.55	0.51	0.04	0.51	0.51
v/c Ratio	0.79	1.00	1.30	0.16	0.35	0.55	0.80	0.16	0.58
Control Delay	63.3	81.2	220.1	46.9	18.8	29.0	27.5	4.7	79.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.3	81.2	220.1	46.9	18.8	29.0	27.5	4.7	79.2
LOS	E	F	F	D	B	C	C	E	A
Approach Delay	73.2	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4
Approach LOS	E	F	F	D	B	C	C	E	A
Intersection Summary									
Cycle Length: 120									
Actuated Cycle Length: 120									
Offset: 0 (0%), Referenced to phase 2(NBTL) and 6(SBT), Start of Green									
Natural Cycle: 100									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 1.30									
Intersection Signal Delay: 36.8									
Intersection Capacity Utilization 87.4%									
Analysis Period (min) 15									
Splits and Phases:	4: Dellyne Ave & Coors Blvd								
	a1	a2	a3	a4	a5	a6	a7	a8	a9
	10 s	165 s	10 s	165 s	10 s	165 s	10 s	165 s	10 s
	10 s	165 s	10 s	165 s	10 s	165 s	10 s	165 s	10 s

2015 AM Peak BUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis

4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/3/2011 - 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)	269	39	138	32	76	62	1722	116	74
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	0.97	1.00	0.97	1.00	0.97
Fit Protected	1.00	0.87	1.00	1.00	0.85	1.00	0.85	1.00	0.85
Satd. Flow (prot)	3400	1600	3400	1600	3400	1600	3400	1600	3400
Fit Permitted	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
Satd. Flow (perm)	3400	1600	3400	1600	3400	1600	3400	1600	3400
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	359	52	395	184	43	104	74	2050	138
RTOR Reduction (vph)	0	59	0	0	0	67	0	55	0
Lane Group Flow (vph)	359	388	0	184	43	37	74	2050	83
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Perm
Protected Phases	7	4	3	8	5	2	2	1	6
Actuated Green, G (s)	16.1	29.0	5.0	17.9	66.0	61.0	5.0	61.0	61.0
Effective Green, g (s)	16.1	29.0	5.0	17.9	66.0	61.0	5.0	61.0	61.0
Actuated g/C Ratio	0.13	0.24	0.04	0.15	0.55	0.51	0.04	0.51	0.51
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)	456	387	142	275	234	135	2560	797	142
v/s Ratio Prot	0.11	c0.24	c0.05	0.02	0.02	0.41	c0.02	c0.49	c0.02
v/s Ratio Perm	0.79	1.00	1.30	0.16	0.16	0.55	0.80	0.10	0.58
Uniform Delay, d1	50.3	45.5	57.5	44.5	25.6	24.5	15.3	56.5	28.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.23	0.46
Incremental Delay, d2	8.7	46.3	175.3	0.3	0.3	4.5	2.7	0.3	3.4
Delay (s)	59.0	91.8	232.8	44.7	44.8	30.1	27.2	15.6	72.7
Level of Service	E	F	F	D	D	C	B	E	B
Approach Delay (s)	77.2	77.2	149.3	149.3	149.3	26.6	21.1	21.1	21.1
Approach LOS	E	E	F	F	F	C	C	C	C
Intersection Summary									
HCM Average Control Delay	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9
HCM Volume to Capacity ratio	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Actuated Cycle Length (s)	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Intersection Capacity Utilization	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%	87.4%
Analysis Period (min)	15	15	15	15	15	15	15	15	15
c Critical Lane Group									

2015 AM Peak BUILD Conditions

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Existing Geometry

Timings

4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/2/2011

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	114	20	108	86	21	38	353	2496	44	21	2066	148
Volume (vph)	114	20	108	86	21	38	353	2496	44	21	2066	148
Turn Type	Prot	7	4	3	8	8	2	2	2	1	6	6
Permitted Phases	7	4	4	3	8	8	2	2	2	1	6	6
Detector Phases	7	4	4	3	8	8	2	2	2	1	6	6
Switch Phase	7	4	4	3	8	8	2	2	2	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	21.0	10.0	21.0	21.0	10.0	21.0	10.0	21.0	21.0	10.0
Total Split (%)	16.0	22.0	22.0	15.0	21.0	21.0	30.0	83.0	83.0	10.0	63.0	63.0
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	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Recall Mode	Min	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	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	0.48
Queue Delay	103.6	59.1	18.9	84.8	63.2	22.2	53.0	18.8	4.5	63.2	17.0	0.5
Total Delay	103.6	59.1	18.9	84.8	63.2	22.2	53.0	18.8	4.5	63.2	17.0	0.5
LOS	F	E	B	F	E	C	D	B	A	E	B	A
Approach Delay	62.5	E	B	62.1	E	C	D	B	A	E	B	A
Approach LOS	E	E	B	E	E	C	D	B	A	E	B	A

Intersection Summary
Cycle Length: 130
Offset: 127 (98%), Referenced to phase 2(NBTL) 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
Intersection LOS: C
ICU Level of Service E



2015 PM Peak NOBUILD Conditions

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Existing Geometry

HCM Signalized Intersection Capacity Analysis

4: Dellyne Ave & Coors Blvd

Terry O. Brown, PE
11/2/2011

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	114	20	106	68	21	38	353	2496	44	21	2066	148
Volume (vph)	114	20	106	68	21	38	353	2496	44	21	2066	148
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1845	1568
Fit Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	1845	1568	1752	1845	1568	1752	1845	1568	1752	1845	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	0.97
Adj. Flow (vph)	128	22	119	88	28	51	368	2600	46	22	2130	153
RTOR Reduction (vph)	0	0	111	0	0	48	0	0	0	12	0	0
Lane Group Flow (vph)	128	22	8	88	28	3	368	2600	34	22	2130	91
Turn Type	Prot	Prot	Perm	Prot	Prot	Perm	Perm	Perm	Perm	Prot	Prot	Perm
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	6
Permitted Phases	7	4	4	3	8	8	5	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	62.9	62.9
Effective Green, g (s)	11.0	9.2	9.2	9.5	7.7	7.7	96.3	84.1	84.1	7.2	62.9	62.9
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	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	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)	148	131	111	128	109	93	440	3258	1014	97	2437	759
v/s Ratio Prot	cd.07	0.01	0.01	0.05	e0.02	0.00	cd.18	0.52	0.02	cd.42	0.01	cd.42
v/s Ratio Perm	0.85	0.17	0.08	0.69	0.26	0.03	0.84	0.80	0.03	0.03	0.87	0.12
Uniform Delay, d1	58.8	56.8	56.4	58.8	58.4	57.6	40.0	16.8	8.3	58.7	30.0	18.4
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	37.4	0.6	0.3	14.3	1.3	0.1	12.9	2.1	0.1	0.4	1.6	0.1
Delay (s)	96.2	57.4	56.7	73.1	59.7	57.8	53.0	18.9	8.3	62.3	15.8	1.3
Level of Service	F	E	E	E	E	E	D	B	A	E	B	A
Approach Delay (s)	75.5	E	E	66.2	E	E	22.8	C	C	15.3	B	B
Approach LOS	E	E	E	E	E	E	C	C	C	B	B	B

Intersection Summary
HCM Average Control Delay 23.6 HCM Level of Service C
HCM Volume to Capacity ratio 0.82
Actual Cycle Length (s) 130.0 Sum of lost time (s)
Intersection Capacity Utilization 85.0% ICU Level of Service E
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
11/2/2011 - Synchro 7

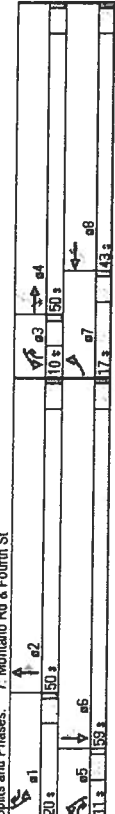
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	157	1298	505	127	378	69	218	424	188	204	516
Volume (vph)	157	1298	505	127	378	69	218	424	188	204	516
Turn Type	pm-pt	7	4	5	3	8	1	5	2	3	1
Protected Phases	pm-pt	7	4	5	3	8	1	5	2	3	1
Permitted Phases	pm-pt	7	4	5	3	8	1	5	2	3	1
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase	7	4	5	3	8	1	5	2	3	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	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	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	59.0
Total Split (%)	13.1%	38.5%	8.5%	7.7%	33.1%	15.4%	8.5%	38.5%	7.7%	15.4%	45.4%
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimizes?	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act/Eff Green (s)	54.9	45.0	36.6	57.2	52.3	46.3	56.3	64.9	54.0	54.0	54.0
Actuated g/C Ratio	0.42	0.35	0.43	0.34	0.30	0.44	0.40	0.38	0.43	0.50	0.42
v/c Ratio	0.50	1.19	0.73	1.29	0.48	0.12	0.99	0.41	0.32	0.53	1.428r
Control Delay	29.4	131.5	27.2	207.0	39.1	4.6	79.1	33.1	17.9	23.5	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
Total Delay	29.4	131.5	27.2	207.0	39.1	4.6	79.1	33.1	17.9	23.5	113.6
LOS	C	F	C	F	D	A	E	C	B	C	F
Approach Delay	96.5	F	F	F	E	A	E	C	B	C	F
Approach LOS	F	F	F	F	E	A	E	C	B	C	F

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Natural Cycle: 130
 Control Type: Semi-Act-Uncoord
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 86.2
 Intersection Capacity Utilization 113.2%
 Analysis Period (min) 15
 or Defacto Right Lane. Recode with 1 though lane as a right lane.

Intersection LOS: F
 ICU Level of Service H

Splits and Phases: 7: Montano Rd & Fourth St



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
11/2/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBT
Lane Configurations	157	1298	505	127	378	69	218	424	188	204	516	1027
Volume (vph)	157	1298	505	127	378	69	218	424	188	204	516	1027
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
Frt	1.00	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	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
Satd. Flow (pm)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3155	1000
Flt Permitted	0.32	1.00	1.00	0.10	1.00	1.00	0.09	1.00	1.00	0.33	1.00	0.95
Satd. Flow (pm)	582	3505	1568	191	3505	1568	309	3505	1568	610	3155	0
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	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	458	161	478	35	263	511	184	224	1553	0
Turn Type	pm-pt	7	4	5	3	8	1	5	2	3	1	6
Protected Phases	pm-pt	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	pm-pt	7	4	5	3	8	1	5	2	3	1	6
Actuated Green, G (s)	55.0	45.0	51.0	43.6	38.6	52.3	52.3	46.3	61.3	65.0	54.0	54.0
Effective Green, g (s)	55.0	45.0	51.0	43.6	38.6	52.3	52.3	46.3	61.3	65.0	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	1246	679	425	1311	1311
Via Ratio Prot	0.04	c0.41	0.03	c0.06	0.14	0.01	c0.05	0.15	0.01	0.06	c0.49	0.49
v/c Ratio Perm	0.17	1.19	0.68	1.30	0.46	0.05	0.99	0.41	0.27	0.53	1.428r	1.428r
v/c Ratio	0.50	1.19	0.68	1.30	0.46	0.05	0.99	0.41	0.27	0.53	1.428r	1.428r
Uniform Delay, d1	25.1	42.5	32.7	41.7	37.2	23.7	34.8	31.5	26.7	19.8	38.0	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	1.00
Incremental Delay, 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
Delay (s)	26.2	135.9	35.4	222.8	37.5	23.7	65.3	32.5	26.9	20.9	129.0	129.0
Level of Service	C	F	D	F	D	C	F	C	C	C	F	F
Approach Delay (s)	101.3	F	F	F	E	E	45.1	D	45.1	116.4	F	F
Approach LOS	F	F	F	F	E	E	D	D	D	F	F	F

Intersection Summary

HCM Average Control Delay
 HCM Volume to Capacity ratio
 Actuated Cycle Length (s)
 Intersection Capacity Utilization
 Analysis Period (min)
 or Defacto Right Lane. Recode with 1 though lane as a right lane.
 c Critical Lane Group

93.6
 1.25
 130.0
 113.2%
 15

HCM Level of Service
 Sum of lost time (s)
 ICU Level of Service

F
 25.0
 H

2015 AM Peak NOBUILD Conditions

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 Existing Geometry

Timings

7: Montano Rd & Fourth St

Terry O. Brown, PE
11/3/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	171	1333	549	127	387	69	271	424	188	204	516
Volume (vph)	171	1333	549	127	387	69	271	424	188	204	516
Turn Type	pm+pt	pm+pt	pm+ov	pm+pt	pm+ov	pm+pt	pm+pt	pm+pt	pm+ov	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	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	10.0	10.0	10.0	21.0
Minimum Split (s)	17.0	50.0	11.0	10.0	43.0	20.0	11.0	60.0	10.0	20.0	59.0
Total Split (%)	13.1%	38.5%	8.5%	7.7%	33.1%	15.4%	8.5%	38.5%	7.7%	15.4%	45.4%
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	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effd Green (s)	55.0	45.0	55.0	43.4	38.4	57.1	52.3	46.3	55.3	64.9	54.0
Actuated g/C Ratio	0.42	0.35	0.43	0.33	0.30	0.44	0.40	0.36	0.43	0.50	0.42
Control Delay	31.1	144.4	31.3	207.0	39.4	4.6	156.3	33.1	18.0	23.5	120.4
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	31.1	144.4	31.3	207.0	39.4	4.6	156.3	33.1	18.0	23.5	120.4
LOS	C	F	C	F	D	A	F	C	B	C	F
Approach Delay	104.7	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
Approach LOS	F	E	E	E	E	E	E	E	E	E	E

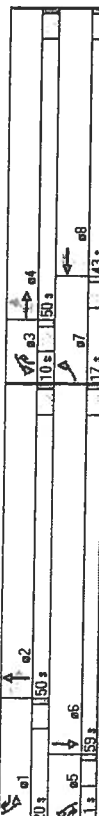
Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Natural Cycle: 130
 Control Type: Semi-Auto-Uncoordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 95.6
 Intersection Capacity Utilization: 116.3%
 Analysis Period (min): 15
 dr Defacto Right Lane. Record with 1 through lane as a right lane.

Intersection LOS: F
 ICU Level of Service: H

dr Defacto Right Lane. Record with 1 through lane as a right lane.

Splits and Phases: 7: Montano Rd & Fourth St



2015 AM Peak Build Conditions

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 Existing Geometry

HCM Signalized Intersection Capacity Analysis

7: Montano Rd & Fourth St

Terry O. Brown, PE
11/3/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	171	1333	549	127	387	69	271	424	188	204	516
Volume (vph)	171	1333	549	127	387	69	271	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	0.95	1.00	0.85	1.00	1.00	0.85	1.00	0.95	1.00	0.85	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3153
Flt Permitted	0.31	1.00	1.00	0.10	1.00	1.00	0.09	1.00	1.00	0.33	1.00
Satd. Flow (perm)	565	3505	1568	192	3505	1568	309	3505	1568	610	3153
Peak-hour factor, PHF	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)	190	1481	610	161	490	87	327	511	227	224	567
RTOR Reduction (vph)	0	0	103	0	0	52	0	0	42	0	140
Lane Group Flow (vph)	190	1481	507	161	490	35	327	511	185	224	1576
Turn Type	pm+pt	pm+ov	pm+pt	pm+pt	pm+ov	pm+pt	pm+pt	pm+pt	pm+ov	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
Actuated Green, G (s)	55.0	45.0	51.0	43.4	38.4	52.1	52.3	46.3	51.3	65.0	54.0
Effective Green, g (s)	55.0	45.0	51.0	43.4	38.4	52.1	52.3	46.3	51.3	65.0	54.0
Actuated g/C Ratio	0.42	0.35	0.39	0.33	0.30	0.40	0.40	0.36	0.39	0.50	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)	345	1213	675	124	1035	689	267	1248	679	425	1310
v/c Ratio Prot	0.05	c0.42	0.03	c0.05	0.14	0.01	c0.05	0.15	0.01	0.06	c0.50
v/c Ratio Perm	0.18	0.29	0.29	0.38	0.44	0.02	0.44	0.11	0.21	0.21	0.21
v/c Ratio	0.35	1.22	0.75	1.30	0.47	0.05	1.22	0.41	0.27	0.53	1.454r
Uniform Delay, d1	25.4	42.5	34.0	41.9	37.5	23.8	35.2	31.5	26.7	19.8	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	1.9	107.0	4.7	181.1	0.3	0.0	129.8	1.0	0.2	1.2	99.0
Delay (s)	27.3	149.5	38.7	223.0	37.9	23.9	165.0	32.5	26.9	20.9	137.0
Level of Service	C	F	D	F	D	C	F	C	C	C	F
Approach Delay (s)	109.7	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
Approach LOS	F	E	E	E	E	E	E	E	E	E	E

Intersection Summary

HCM Average Control Delay: 103.5
 HCM Level of Service: F
 HCM Volume to Capacity ratio: 1.22
 Actuated Cycle Length (s): 130.0
 Sum of lost time (s): 20.0
 Intersection Capacity Utilization: 116.3%
 ICU Level of Service: H
 Analysis Period (min): 15
 dr Defacto Right Lane. Record with 1 through lane as a right lane.

c Critical Lane Group

2015 AM Peak Build Conditions

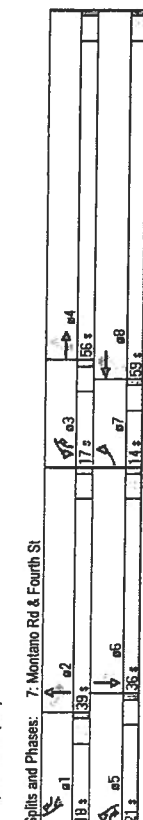
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 Existing Geometry

Timings 7: Montano Rd & Fourth St

Terry O. Brown, PE
11/2/2011

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	149	820	264	160	1276	202	438	565	166	176	520
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
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	7	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	7	4	5	3	8	1	5	2	3	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	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0
Total Split (s)	14.0	56.0	21.0	17.0	59.0	18.0	21.0	38.0	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	50.9	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	0.55	0.39	0.27	0.39	0.33	0.24
v/c Ratio	0.88	0.47	0.30	0.48	0.96	0.25	0.93	0.68	0.27	0.71	0.89
Control Delay	79.8	19.3	2.1	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	79.8	19.3	2.1	21.0	53.5	11.3	59.7	47.4	8.5	42.8	59.7
LOS	E	B	A	C	D	B	E	D	A	D	E
Approach Delay	23.7	C			45.1			48.5			56.2
Approach LOS					D			D			E

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 84 (65%), Referenced to phase 2-NBTL and 6-SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 42.9
Intersection Capacity Utilization 91.8%
Analysis Period (min) 15



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

Terry O. Brown, PE
11/2/2011

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	149	820	264	160	1276	202	438	565	166	176	520	148
Volume (vph)	pm-pt	7	4	5	3	8	1	5	2	3	1	6
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	0.95	1.00	0.95	1.00	0.95	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3388	1568
Flt Permitted	0.08	1.00	1.00	0.29	1.00	1.00	0.12	1.00	0.23	1.00	0.23	1.00
Satd. Flow (perm)	142	3505	1568	530	3505	1568	415	3505	1568	433	3388	415
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	635	187	193	571	187
RTOR Reduction (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	193	714	0
Turn Type	pm-pt	7	4	5	3	8	1	5	2	3	1	6
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	6
Permitted Phases	7	4	5	3	8	1	5	2	3	1	6	6
Actuated Green, G (s)	50.9	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	1456	862	529	930	610	272	808	0
v/s 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
v/s Ratio Perm	0.35	0.11	0.11	0.20	0.10	0.25	0.05	0.05	0.05	0.17	0.17	0
v/c Ratio	0.88	0.47	0.25	0.48	0.96	0.22	0.93	0.68	0.16	0.71	0.88	0
Uniform Delay, d1	32.3	26.8	17.1	19.2	37.0	17.5	35.9	42.8	29.0	33.2	47.8	0
Progression Factor	1.44	0.63	0.16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0
Incremental Delay, d2	33.9	0.2	0.1	1.0	15.6	0.1	23.2	4.1	0.1	8.2	13.5	0
Delay (s)	80.4	18.3	2.8	20.2	52.6	17.6	59.0	46.9	29.1	41.5	61.3	0
Level of Service	F	B	A	C	D	B	E	D	C	D	E	E
Approach Delay (s)	23.3	C			45.1			48.9			57.2	E
Approach LOS					D			D			E	E

Intersection Summary
HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
Intersection Capacity Utilization
Analysis Period (min)
c Critical Lane Group

43.5
0.92
130.0
91.8%
15

2015 PM Peak NOBUILD Conditions
Existing Geometry
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Timings

7: Montano Rd & Fourth St Terry O. Brown, PE
11/3/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	197	639	380	160	1311	202	564	585	166	178	520
Volume (vph)	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Turn Type	7	4	5	3	8	1	5	2	3	1	8
Protected Phases	4	4	4	8	8	0	2	2	2	6	6
Permitted Phases	7	4	4	8	8	1	5	2	3	1	8
Detector Phase	7	4	4	8	8	1	5	2	3	1	8
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)	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%	43.1%	15.4%	19.2%	29.2%	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	None	None	None	None	C-Max
Act Effect Green (s)	61.9	50.9	75.9	62.1	51.0	69.6	53.0	34.4	50.5	41.6	28.0
Actuated g/C Ratio	0.40	0.39	0.58	0.48	0.39	0.54	0.41	0.26	0.39	0.32	0.22
v/c Ratio	1.01	0.49	0.41	0.50	1.05	0.26	1.00	0.68	0.27	0.57	1.05
Control Delay	87.1	33.1	21.7	22.2	76.4	12.5	73.0	47.7	8.7	38.9	92.8
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	87.1	33.1	21.7	22.2	76.4	12.5	73.0	47.7	8.7	38.9	92.8
LOS	F	C	C	C	E	B	E	D	A	D	F
Approach Delay	38.3										
Approach LOS	D										

Intersection Summary

Cycle Length: 130
Actual Cycle Length: 130
Offset: 20 (15%), Referenced to phase 2 NBT and 6 SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 58.5
Intersection Capacity Utilization 100.7%
Analysis Period (min) 15

Intersection LOS: E
ICU Level of Service G

Splits and Phases: 7: Montano Rd & Fourth St

20 s	13 s	17 s	15 s
a1	a2	a3	a4
a5	a6	a7	a8
25 s	13 s	15 s	15 s

2015 PM Peak BUILD Conditions

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Existing Geometry

7: Montano Rd & Fourth St Terry O. Brown, PE
11/3/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	197	639	380	180	1311	202	564	585	166	178	520
Volume (vph)	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt	pm-pt
Turn Type	7	4	5	3	8	1	5	2	3	1	8
Protected Phases	4	4	4	8	8	0	2	2	2	6	6
Permitted Phases	7	4	4	8	8	1	5	2	3	1	8
Detector Phase	7	4	4	8	8	1	5	2	3	1	8
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)	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%	43.1%	15.4%	19.2%	29.2%	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	None	None	None	None	C-Max
Act Effect Green (s)	61.9	50.9	75.9	62.1	51.0	69.6	53.0	34.4	50.5	41.6	28.0
Actuated g/C Ratio	0.40	0.39	0.58	0.48	0.39	0.54	0.41	0.26	0.39	0.32	0.22
v/c Ratio	1.01	0.49	0.41	0.50	1.05	0.26	1.00	0.68	0.27	0.57	1.05
Control Delay	87.1	33.1	21.7	22.2	76.4	12.5	73.0	47.7	8.7	38.9	92.8
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	87.1	33.1	21.7	22.2	76.4	12.5	73.0	47.7	8.7	38.9	92.8
LOS	F	C	C	C	E	B	E	D	A	D	F
Approach Delay	38.3										
Approach LOS	D										

Intersection Summary

Cycle Length: 130
Actual Cycle Length: 130
Offset: 20 (15%), Referenced to phase 2 NBT and 6 SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 58.5
Intersection Capacity Utilization 100.7%
Analysis Period (min) 15

Intersection LOS: E
ICU Level of Service G

2015 PM Peak BUILD Conditions

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Existing Geometry

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

Terry O. Brown, PE
11/3/2011 - 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	0.84	0.84	0.84	0.83	0.83	0.83	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	33	2564	37	114	527	64	0	0	85	0	0	41
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			2601			3164	3450	1282	2221	3455	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			2440			3231	3633	586	1906	3640	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			14			100	100	73	100	100	94
cM capacity (veh/h)	974			133			1	0	321	6	0	698
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	33	1282	1282	37	114	351	239	85	41			
Volume Left	33	0	0	0	114	0	0	0	0			
Volume Right	0	0	0	37	0	0	64	85	41			
cSH	974	1700	1700	1700	133	1700	1700	321	698			
Volume to Capacity	0.03	0.75	0.75	0.02	0.86	0.21	0.14	0.27	0.06			
Queue Length 95th (ft)	3	0	0	0	137	0	0	26	5			
Control Delay (s)	8.8	0.0	0.0	0.0	108.0	0.0	0.0	20.2	10.5			
Lane LOS	A				F			C	B			
Approach Delay (s)	0.1				17.5			20.2	10.5			
Approach LOS								C	B			
Intersection Summary												
Average Delay			4.3									
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
11/4/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	29	2154	38	153	461	53	0	0	145	0	0	33
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.96	0.95	0.88	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	31	2244	40	174	512	62	0	0	171	0	0	39
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	575			2284			2947	3227	1122	2245	3236	287
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	575			1992			2926	3320	357	1937	3332	287
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			13			100	100	62	100	100	95
cM capacity (veh/h)	988			200			1	1	453	4	1	706
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	31	1122	1122	40	174	341	233	171	39			
Volume Left	31	0	0	0	174	0	0	0	0			
Volume Right	0	0	0	40	0	0	62	171	39			
cSH	988	1700	1700	1700	200	1700	1700	453	706			
Volume to Capacity	0.03	0.66	0.66	0.02	0.87	0.20	0.14	0.38	0.05			
Queue Length 95th (ft)	2	0	0	0	165	0	0	43	4			
Control Delay (s)	8.8	0.0	0.0	0.0	82.7	0.0	0.0	17.7	10.4			
Lane LOS	A				F			C	B			
Approach Delay (s)	0.1				19.2			17.7	10.4			
Approach LOS								C	B			
Intersection Summary												
Average Delay			5.5									
Intersection Capacity Utilization			75.2%		ICU Level of Service				D			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

8: Montano Rd & Winterhaven Rd

Terry O. Brown, PE
11/4/2011 - 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	0.75	0.75	0.75	0.82	0.82	0.82
Hourly flow rate (vph)	63	810	16	79	1509	360	0	0	84	0	0	89
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	1869			827			1938	2963	405	2462	2800	935
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1869			754			1902	2962	319	2444	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	87	100	100	66
cM capacity (veh/h)	314			818			21	10	652	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	84	89			
Volume Left	63	0	0	0	79	0	0	0	0			
Volume Right	0	0	0	16	0	0	360	84	89			
cSH	314	1700	1700	1700	818	1700	1700	652	265			
Volume to Capacity	0.20	0.24	0.24	0.01	0.10	0.59	0.51	0.13	0.34			
Queue Length 95th (ft)	18	0	0	0	8	0	0	11	36			
Control Delay (s)	19.3	0.0	0.0	0.0	9.9	0.0	0.0	11.3	25.3			
Lane LOS	C				A			B	D			
Approach Delay (s)	1.4				0.4			11.3	25.3			
Approach LOS								B	D			
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			61.7%		ICU Level of Service				B			
Analysis Period (min)			15									

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

11/4/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (veh/h)	65	842	31	323	1398	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	0.75	0.75	0.75	0.82	0.82	0.82
Hourly flow rate (vph)	67	868	32	340	1472	360	0	0	252	0	0	95
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	1832			900			2513	3514	434	3152	3366	916
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1832			823			2495	3532	340	3157	3379	916
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			56			100	100	60	100	100	65
cM capacity (veh/h)	325			768			5	2	630	1	3	273
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	67	434	434	32	340	981	851	252	95			
Volume Left	67	0	0	0	340	0	0	0	0			
Volume Right	0	0	0	32	0	0	360	252	95			
cSH	325	1700	1700	1700	768	1700	1700	630	273			
Volume to Capacity	0.21	0.26	0.26	0.02	0.44	0.58	0.50	0.40	0.35			
Queue Length 95th (ft)	19	0	0	0	57	0	0	48	38			
Control Delay (s)	18.9	0.0	0.0	0.0	13.4	0.0	0.0	14.5	25.1			
Lane LOS	C				B			B	D			
Approach Delay (s)	1.3				2.1			14.5	25.1			
Approach LOS								B	D			
Intersection Summary												
Average Delay			3.4									
Intersection Capacity Utilization			61.1%		ICU Level of Service				B			
Analysis Period (min)			15									

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

Terry O. Brown, PE
11/4/2011 - Synchro 7

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	2425	102	0	662	0	55
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	2636	111	0	779	0	65
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			2747		3025	1318
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2638		3036	596
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	79
cM capacity (veh/h)			109		7	311
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	1318	1318	111	389	389	65
Volume Left	0	0	0	0	0	0
Volume Right	0	0	111	0	0	65
cSH	1700	1700	1700	1700	1700	311
Volume to Capacity	0.78	0.78	0.07	0.23	0.23	0.21
Queue Length 95th (ft)	0	0	0	0	0	19
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	19.6
Lane LOS						C
Approach Delay (s)	0.0			0.0		19.6
Approach LOS						C
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			77.1%		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
11/4/2011 - Synchro 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	838	153	0	1694	0	112
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.85	0.85
Hourly flow rate (vph)	901	165	0	1822	0	132
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			1066		1812	451
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			863		1688	184
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	82
cM capacity (veh/h)			696		76	746
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	451	451	165	911	911	132
Volume Left	0	0	0	0	0	0
Volume Right	0	0	165	0	0	132
cSH	1700	1700	1700	1700	1700	746
Volume to Capacity	0.27	0.27	0.10	0.54	0.54	0.18
Queue Length 95th (ft)	0	0	0	0	0	16
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.9
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.9
Approach LOS						B
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			50.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: E-W St & Coors Blvd

Terry O. Brown, PE
11/4/2011 - Synchro 7

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Volume (veh/h)	0	69	2164	50	0	2037		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.85	0.85	0.88	0.88	0.88	0.88		
Hourly flow rate (vph)	0	81	2459	57	0	2315		
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	3259	643			2516			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	2754	643			2516			
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	80			100			
cM capacity (veh/h)	11	414			174			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	81	703	703	703	408	772	772	772
Volume Left	0	0	0	0	0	0	0	0
Volume Right	81	0	0	0	57	0	0	0
cSH	414	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.20	0.41	0.41	0.41	0.24	0.45	0.45	0.45
Queue Length 95th (ft)	18	0	0	0	0	0	0	0
Control Delay (s)	15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	15.8	0.0					0.0	
Approach LOS	C							
Intersection Summary								
Average Delay			0.3					
Intersection Capacity Utilization			43.1%	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
11/4/2011 - Synchro 7

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	0	225	2703	132	0	2516			
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	2816	138	0	2621			
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	3758	773			2953				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	3466	773			2953				
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	22			100				
cM capacity (veh/h)	3	340			116				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	
Volume Total	265	804	804	804	540	874	874	874	
Volume Left	0	0	0	0	0	0	0	0	
Volume Right	265	0	0	0	138	0	0	0	
cSH	340	1700	1700	1700	1700	1700	1700	1700	
Volume to Capacity	0.78	0.47	0.47	0.47	0.32	0.51	0.51	0.51	
Queue Length 95th (ft)	158	0	0	0	0	0	0	0	
Control Delay (s)	44.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	E								
Approach Delay (s)	44.6	0.0			0.0				
Approach LOS	E								
Intersection Summary									
Average Delay			2.0						
Intersection Capacity Utilization			62.0%	ICU Level of Service		B			
Analysis Period (min)			15						

HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/4/2011 - Synchro 7

										
Movement	WBL	WBR	NBT	NBR	SBL	SBT				
Lane Configurations										
Volume (veh/h)	0	69	2121	55	120	1927				
Sign Control	Stop		Free			Free				
Grade	0%		0%			0%				
Peak Hour Factor	0.85	0.85	0.88	0.88	0.88	0.88				
Hourly flow rate (vph)	0	81	2410	62	136	2190				
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	3444	634				2473				
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	2653	0				1381				
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				63				
cM capacity (veh/h)	9	825				372				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	81	689	689	689	407	136	730	730	730	
Volume Left	0	0	0	0	0	136	0	0	0	
Volume Right	81	0	0	0	62	0	0	0	0	
cSH	825	1700	1700	1700	1700	372	1700	1700	1700	
Volume to Capacity	0.10	0.41	0.41	0.41	0.24	0.37	0.43	0.43	0.43	
Queue Length 95th (ft)	8	0	0	0	0	41	0	0	0	
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0	
Lane LOS	A					C				
Approach Delay (s)	9.8	0.0					1.2			
Approach LOS	A									
Intersection Summary										
Average Delay	0.7									
Intersection Capacity Utilization	45.0%		ICU Level of Service				A			
Analysis Period (min)	15									

2015 AM Peak BUILD Conditions

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

HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, PE
11/4/2011 - Synchro 7

										
Movement	WBL	WBR	NBT	NBR	SBL	SBT				
Lane Configurations			 			 				
Volume (veh/h)	0	185	2576	148	237	2278				
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	218	2683	154	247	2373				
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	0.65	0.65				0.65				
vC, conflicting volume	4045	748				2838				
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	3000	0				1147				
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	69				37				
cM capacity (veh/h)	2	705				390				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	218	767	767	767	538	247	791	791	791	
Volume Left	0	0	0	0	0	247	0	0	0	
Volume Right	218	0	0	0	154	0	0	0	0	
cSH	705	1700	1700	1700	1700	390	1700	1700	1700	
Volume to Capacity	0.31	0.45	0.45	0.45	0.32	0.63	0.47	0.47	0.47	
Queue Length 95th (ft)	33	0	0	0	0	105	0	0	0	
Control Delay (s)	12.4	0.0	0.0	0.0	0.0	28.8	0.0	0.0	0.0	
Lane LOS	B					D				
Approach Delay (s)	12.4	0.0				2.7				
Approach LOS	B									
Intersection Summary										
Average Delay			1.7							
Intersection Capacity Utilization			59.6%	ICU Level of Service				B		
Analysis Period (min)			15							

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	468	402	59	425	63	73	225	83	89	225	2
8:15 AM	8:30 AM	35	446	142	37	73	43	42	269	66	44	246	4
8:30 AM	8:45 AM	67	466	124	42	85	30	28	200	64	70	162	2
8:45 AM	9:00 AM	59	424	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	487	78	58	425	39	56	325	11
4:15 PM	4:30 PM	54	87	74	74	494	84	62	428	46	60	347	10
4:30 PM	4:45 PM	55	82	74	75	495	94	49	430	48	64	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	400	245	34	437	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**
 E-W Street **Dellyne Ave. (Learning Rd.)** Speed Limit (Dellyne Ave.)= 25 MPH
 N-S Street: **Coors Blvd.** Speed Limit (Coors Blvd.)= 45 MPH
 Date of Count: 10/20/11

SIGNALIZED

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	464	14
8:30 AM	8:45 AM	20	4	35	4	0	4	24	334	2	4	455	14
8:45 AM	9:00 AM	22	0	44	4	0	0	20	362	4	0	464	13
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

Year Counts Taken: **2011** **Andalucia, Tract 6 Update** **Speed Limit (Montano Rd.)= 25 MPH**
E-W Street Montano Rd. **Speed Limit (Winterhaven)= 25 MPH**
N-S Street: Winterhaven **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	44
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	5
8:15 AM	8:30 AM	47	358	4	3	444	48	0	0	5	0	0	6
8:30 AM	8:45 AM	44	367	0	2	424	44	0	0	6	0	0	7
8:45 AM	9:00 AM	46	326	2	4	444	22	0	0	4	0	0	47
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	44	456	2	44	294	64	0	0	8	0	0	33
4:15 PM	4:30 PM	47	486	4	8	353	77	0	0	8	0	0	29
4:30 PM	4:45 PM	45	224	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	40	454	4	5	358	89	0	0	5	0	0	44
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
N-S Street: Fourth St

Speed Limit (Montano Rd)= 25 MPH

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	420	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	

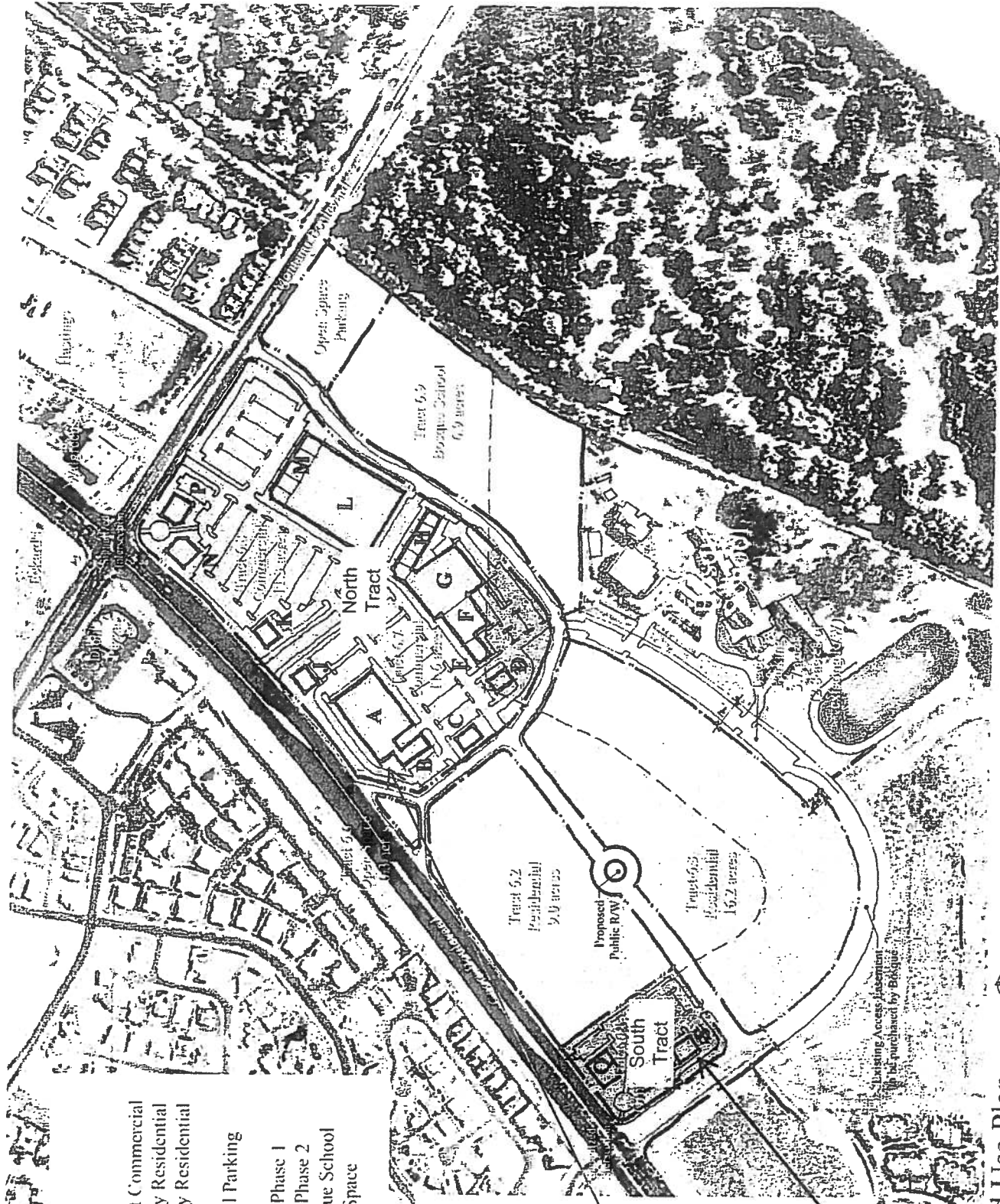
Begin Time	End Time	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Fourth St)			Southbound (Fourth St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	37	426	66	32	239	45	89	450	26	47	426	48
4:15 PM	4:30 PM	34	147	55	43	340	47	102	121	34	48	137	35
4:30 PM	4:45 PM	31	156	62	45	257	50	108	142	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	438	22	45	449	36
5:30 PM	5:45 PM	42	124	44	37	304	45	120	455	30	25	98	46
5:45 PM	6:00 PM	5	49	8	0	0	0	0	0	0	40	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

Tract	Acres	Use
A	44,000	Grocery
B	6,000	Shops
C	5,000	Shops
D	4,000	Drive In Bank
E	5,000	Shops
F	11,000	Retail
G	35,000	Retail
H	15,000	Shops
J	5,000	Restaurant
K	5,000	Restaurant
L	88,000	Retail
M	15,000	Shops
N	6,000	Restaurant
P	6,000	Restaurant
Q	8,000	Restaurant
R	8,000	Restaurant
S	5,000	Drive In Bank



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)	DESCRIPTION	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
		GROSS	ENTER	EXIT	ENTER	EXIT
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	
			Units				
Summary Sheet							
Bldg. A		Supermarket (850)	4,337	92	59	249	239
Bldg. B, C, E, H, M		Specialty Retail Center (814)	2,006	150	191	58	74
Bldg. D		Drive-In Bank (912)	1,563	54	41	127	127
Bldg. F, G, L		Shopping Center (820)	8,214	114	73	366	396
Bldg. S		Drive-In Bank (912)	-	-	-	-	-
Bldg. J, K, N, P, Q, R		High Turnover (Sit-Down) Restaurant (832)	2,867	106	98	143	96
		Subtotal Commercial	18,987	516	462	943	932
		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	40	211	194	95
		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
Based on Trips Generated by APPROVED 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	
234	1,107	300	230	216	148	252	1,124	622	622	1,312	11	
245	1,172	326	242	226	155	279	1,183	652	652	1,382	12	
245	1,229	384	281	226	155	389	1,260	652	670	1,409	12	

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	
262	271	357	378	1,051	154	567	1,638	235	314	1,463	65	
275	301	391	397	1,101	161	633	1,729	246	329	1,544	68	
275	406	503	470	1,101	161	843	1,814	246	362	1,618	68	

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	197	49	110	62	1,737	139	95	2,177	30	

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	305	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	

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.)

0.84			0.83			0.75			0.75			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	2,173	39	174	459	53	0	0	186	0	0	34	

0.97			0.95			0.75			0.82			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	847	30	294	1,438	342	0	0	192	0	0	80	

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2015) - 100% Development

Based on Trips Generated by APPROVED PLAN

INTERSECTION: Summary

Montano Rd / Antequera Rd

(9)

2.0% Truck

Existing (2011)

2015 (NO BUILD - A.M.)

2015 (BUILD - A.M.)

0.76			0.76			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	2,351	0	0	594	0	0	0	0	0	0	0	0
0	2,464	12	0	624	0	0	0	6	0	0	0	0
0	2,417	134	0	663	0	0	0	83	0	0	0	0

0.93			0.93			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	820	0	0	1,583	0	0	0	0	0	0	0	0
0	859	17	0	1,660	0	0	0	16	0	0	0	0
0	839	175	0	1,733	0	0	0	117	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			0.88			0.88			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	1,998	0	0	1,842	0	0
0	0	0	0	0	0	0	2,113	0	0	1,950	0	0
0	0	0	0	0	118	0	2,206	69	0	2,075	0	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	
0	0	0	0	0	0	0	2,440	0	0	2,198	0	0
0	0	0	0	0	0	0	2,609	0	0	2,333	0	0
0	0	0	0	0	262	0	2,730	144	0	2,592	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	1,998	0	0	1,842	0	0
0	0	0	0	0	10	0	2,104	0	10	1,940	0	0
0	0	0	0	0	106	0	2,141	73	134	1,941	0	0

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	2,440	0	0	2,198	0	0
0	0	0	0	0	26	0	2,583	0	14	2,318	0	0
0	0	0	0	0	207	0	2,597	166	262	2,328	0	0

Andalucia Update (Montano Rd / Coors Blvd)**Projected Turning Movements Worksheet****Montano Rd / Coors Blvd****Based on Trips Generated by APPROVED PLAN****INTERSECTION :**E-W Street: **Montano Rd**N-S Street: **Coors Blvd**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 (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	11	53	14	11	10	7	12	54	30	30	63	1
Subtotal	245	1,160	314	241	226	155	264	1,178	652	652	1,375	12
Credit Union (Leaming) Trips (South Tract)	0	12	12	0	0	0	15	5	0	0	7	0
Subtotal (NO BUILD - A.M.)	245	1,172	326	242	226	155	279	1,183	652	652	1,382	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	245	1,229	384	281	226	155	389	1,260	652	670	1,409	12

Adjustment for Heavy EB Flow on Montano

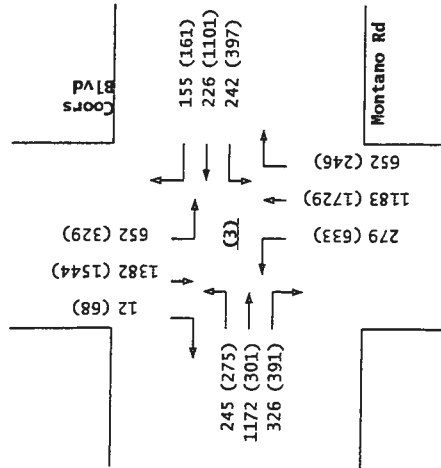
	20			20			20			20		
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65
Background Traffic Growth	13	13	17	18	50	7	27	79	11	15	70	3
Subtotal	275	284	374	396	1,101	161	594	1,717	246	329	1,533	68
Credit Union (Leaming) Trips (South Tract)	0	17	17	1	0	0	39	12	0	0	11	0
Subtotal (NO BUILD - P.M.)	275	301	391	397	1,101	161	633	1,729	246	329	1,544	68
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	275	406	503	470	1,101	161	843	1,814	246	362	1,618	68

	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	662	P.M.	

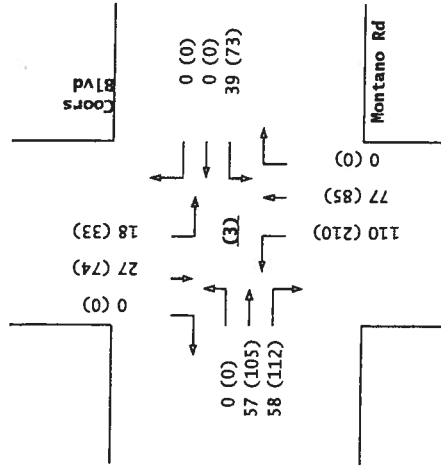
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
2011 AM Peak Hr. Volumes	234	1107	300	230	216	148	252	1,124	622	622	1,312	11
2011 PM Peak Hr. Volumes	262	271	357	378	1,051	154	567	1,638	235	314	1,463	65

Based on Trips Generated by APPROVED PLAN

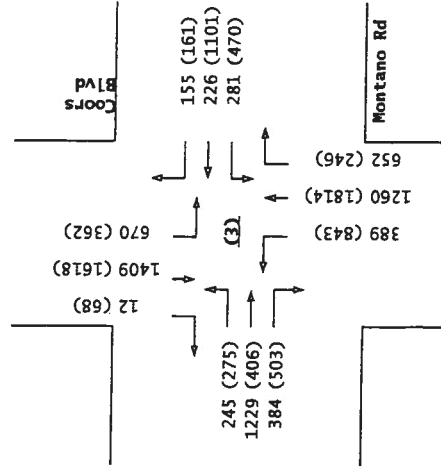
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Coors Blvd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Dellyne Ave / Coors Blvd

Based on Trips Generated by APPROVED PLAN

INTERSECTION :

E-W Street: Dellyne Ave

N-S Street: Coors Blvd

(4)

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 (South Tract)	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%
Total Trips Generated	40	0	0	96	36	92	0	44	51	43	0	0
Total AM Peak Hour BUILD Volumes	282	39	296	197	49	110	62	1,737	139	95	2,177	30

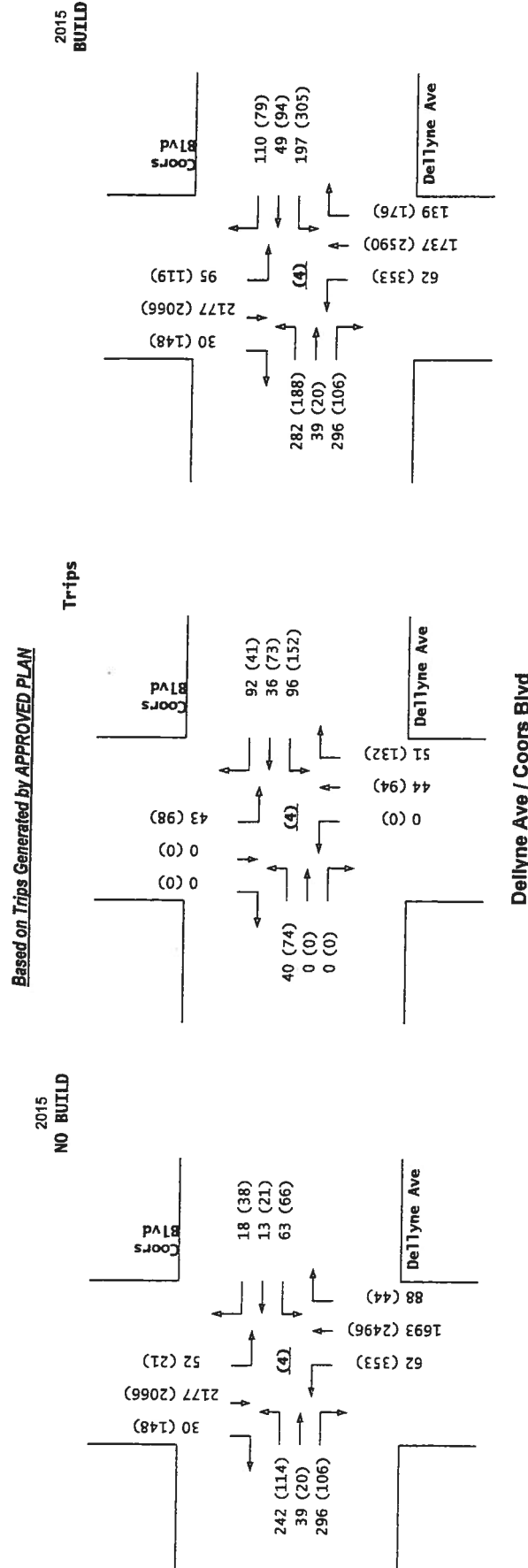
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	109	8	101	37	7	11	337	2,382	20	7	1,971	141
Background Traffic Growth	5	0	5	2	0	1	16	114	1	0	95	7
Subtotal	114	8	106	39	7	12	353	2,496	21	7	2,066	148
Credit Union (Learning) Trips (South Tract)	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%
Total Trips Generated	74	0	0	152	73	41	0	94	132	98	0	0
Total PM Peak Hour BUILD Volumes	188	20	106	305	94	79	353	2,590	176	119	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	361	323	A.M. 100% Commercial Development
	660	652	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												
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Entering	0	0	0	0	0	0	0	0	0	0	0	0
Volume Entering	0.00%	0.00%	0.00%	27.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Exiting	0	0	0	38	0	0	0	0	0	0	0	0
Volume Exiting	0	0	0	38	0	0	0	0	0	0	0	0
Net AM Passby Trips	0	0	0	38	0	0	0	0	0	0	0	0
PM Pass-by Trips												
	Eastbound (Dellyne Ave)			Westbound (Dellyne Ave)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Entering	0	0	0	0	0	0	0	0	0	0	0	0
Volume Entering	0.00%	0.00%	0.00%	31.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Exiting	0	0	0	87	0	0	0	0	0	0	0	0
Volume Exiting	0	0	0	87	0	0	0	0	0	0	0	0
Net PM Passby Trips	0	0	0	87	0	0	0	0	0	0	0	0
Pass-by Trips												
	Entering	Exiting		Entering	Exiting		Entering	Exiting		Entering	Exiting	
	155	139	AM	283	280	PM						



Andalucia Update (Montano Rd / Coors Blvd)**Projected Turning Movements Worksheet****Montano Rd / Winterhaven Rd****Based on Trips Generated by APPROVED PLAN****INTERSECTION:**

E-W Street: **Montano Rd**
 N-S Street: **Winterhaven Rd**

(8)

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 (Leaming) Trips (South Tract)	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	-54	8	14	-14	0	0	0	49	0	0	0
Total AM Peak Hour BUILD Volumes	32	2,173	39	174	459	53	0	0	186	0	0	34

Adjustment for Heavy EB Flow on Montano

	-20			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 (Leaming) Trips (South Tract)	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	-34	14	62	-62	0	0	0	34	0	0	0
Total PM Peak Hour BUILD Volumes	67	847	30	294	1,438	342	0	0	192	0	0	80

	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.	

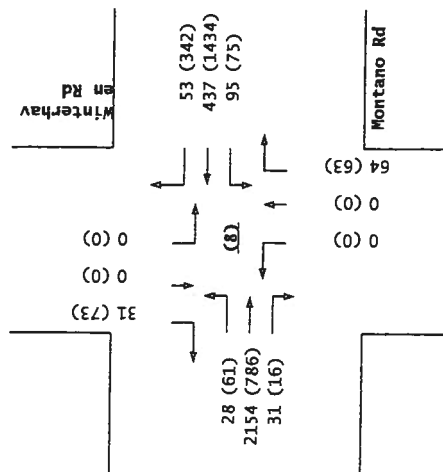
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
2011 AM Peak Hr. Volumes	27	2050	30	73	417	51	0	0	55	0	0	29
2011 PM Peak Hr. Volumes	57	736	15	46	1,368	326	0	0	46	0	0	69

Pass-by Trip Calculations:

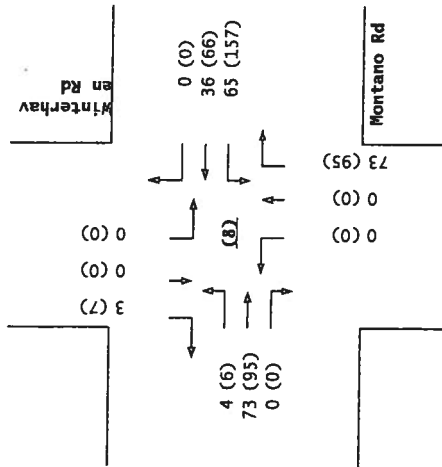
AM Pass-by Trips												
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Winterhaven Rd)			Southbound (Winterhaven Rd)		
Percent Entering	0.00%	-35.00%	5.00%	9.00%	-9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-54	8	14	-14	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	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	49	0	0	0
Net AM Passby Trips	0	-54	8	14	-14	0	0	0	49	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	-34	14	62	-62	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	34	0	0	0
Net PM Passby Trips	0	-34	14	62	-62	0	0	0	34	0	0	0
Pass-by Trips	Entering	Exiting		Entering	Exiting							
	155	139	AM	283	280	PM						

Based on Trips Generated by APPROVED PLAN

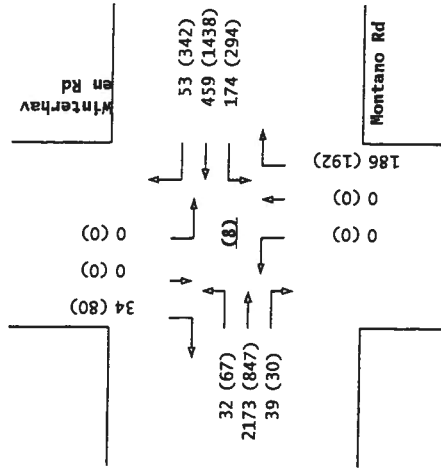
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Winterhaven Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Montano Rd / Antequera Rd

Based on Trips Generated by APPROVED PLAN

INTERSECTION:

E-W Street: Montano Rd

N-S Street: Antequera Rd

(9)

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 (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	113	0	0	29	0	0	0	0	0	0	0
Subtotal	0	2,464	0	0	623	0	0	0	0	0	0	0
Credit Union (Learning) Trips (South Tract)	0	0	12	0	1	0	0	0	6	0	0	0
Subtotal (NO BUILD - A.M.)	0	2,464	12	0	624	0	0	0	6	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%	0.00%	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%
Total Trips Generated	0	0	75	0	39	0	0	0	77	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	0	2,464	87	0	663	0	0	0	83	0	0	0
Pass-by Trip Adjustments	0	-47	47	0	0	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	0	2,417	134	0	663	0	0	0	83	0	0	0

Adjustment for Heavy EB Flow on Montano

	20			20			20			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	820	0	0	1,583	0	0	0	0	0	0	0
Background Traffic Growth	0	39	0	0	76	0	0	0	0	0	0	0
Subtotal	0	859	0	0	1,659	0	0	0	0	0	0	0
Credit Union (Learning) Trips (South Tract)	0	0	17	0	1	0	0	0	16	0	0	0
Subtotal (NO BUILD - P.M.)	0	859	17	0	1,660	0	0	0	16	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%	0.00%	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%
Total Trips Generated	0	0	138	0	73	0	0	0	101	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	0	859	155	0	1,733	0	0	0	117	0	0	0
Pass-by Trip Adjustments	0	-20	20	0	0	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	0	839	175	0	1,733	0	0	0	117	0	0	0

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

100% Commercial Development

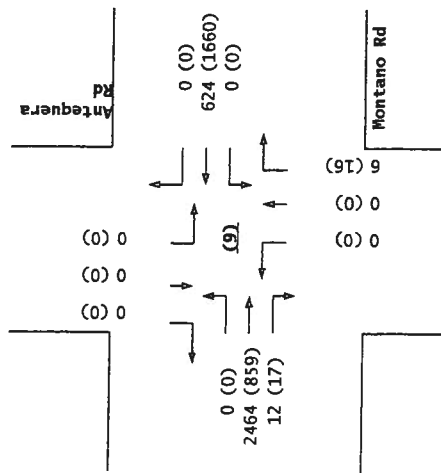
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2011 AM Peak Hr. Volumes	0	2351	0	0	594	0	0	0	0	0	0	0
2011 PM Peak Hr. Volumes	0	820	0	0	1,583	0	0	0	0	0	0	0

Pass-by Trip Calculations:

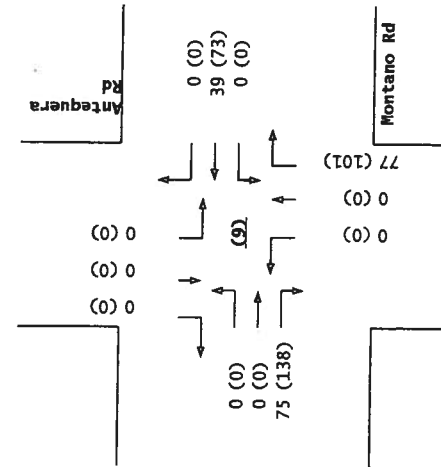
	Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Antequera Rd)			Southbound (Antequera Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
AM Pass-by Trips	0.00%	-30.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Entering	0	-47	47	0	0	0	0	0	0	0	0	0
Volume 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%
Percent Exiting	0	0	0	0	0	0	0	0	0	0	0	0
Volume Exiting	0	-47	47	0	0	0	0	0	0	0	0	0
Net AM Passby Trips	0	-47	47	0	0	0	0	0	0	0	0	0
PM Pass-by Trips	0.00%	-7.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Entering	0	-20	20	0	0	0	0	0	0	0	0	0
Volume 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%
Percent Exiting	0	0	0	0	0	0	0	0	0	0	0	0
Volume Exiting	0	-20	20	0	0	0	0	0	0	0	0	0
Net PM Passby Trips	0	-20	20	0	0	0	0	0	0	0	0	0
Pass-by Trips	Entering	Exiting		Entering	Exiting		Entering	Exiting		Entering	Exiting	
	155	139	AM	283	280	PM						

Based on Trips Generated by APPROVED PLAN

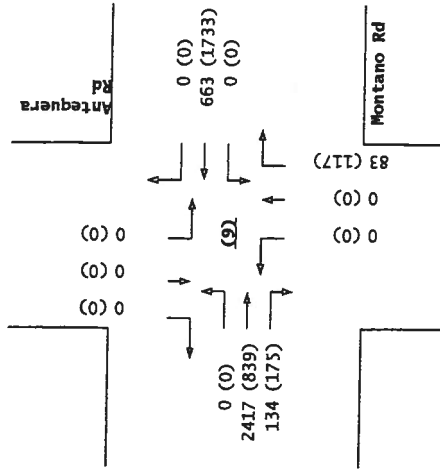
2015
NO BUILD



Trips



2015
BUILD



Montano Rd / Antequera Rd

Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

E-W Street / Coors Blvd

Based on Trips Generated by APPROVED PLAN

INTERSECTION :

E-W Street: E-W Street

N-S Street: Coors Blvd

(10)

Year of Existing Counts

2011

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	96	0	0	88	0
Subtotal	0	0	0	0	0	0	0	2,094	0	0	1,930	0
Credit Union (Leaming) Trips (South Tract)	0	0	0	0	0	0	0	19	0	0	20	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	2,113	0	0	1,950	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%
Total Trips Generated	0	0	0	0	0	90	0	97	40	0	125	0
Subtotal AM Pk Hr. BUILD Volumes	0	0	0	0	0	90	0	2,210	40	0	2,075	0
Pass-by Trip Adjustments	0	0	0	0	0	28	0	-4	29	0	0	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	118	0	2,206	69	0	2,075	0

Adjustement 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
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	117	0	0	106	0
Subtotal	0	0	0	0	0	0	0	2,557	0	0	2,304	0
Credit Union (Leaming) Trips (South Tract)	0	0	0	0	0	0	0	52	0	0	29	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	2,609	0	0	2,333	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%
Total Trips Generated	0	0	0	0	0	181	0	114	73	0	259	0
Subtotal PM Pk Hr. BUILD Volumes	0	0	0	0	0	181	0	2,723	73	0	2,592	0
Pass-by Trip Adjustments	0	0	0	0	0	81	0	7	71	0	0	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	262	0	2,730	144	0	2,592	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

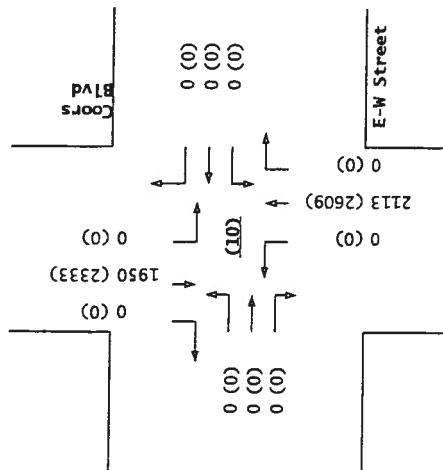
	Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2011 AM Peak Hr. Volumes	0	0	0	0	0	0	0	1,998	0	0	1,842	0
2011 PM Peak Hr. Volumes	0	0	0	0	0	0	0	2,440	0	0	2,198	0

Pass-by Trip Calculations:

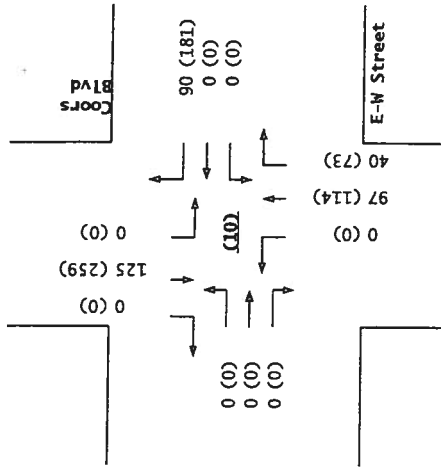
AM Pass-by Trips												
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
Percent Entering	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	0.00%	0.00%	0.00%
Volume Entering	0	0	0	0	0	0	0	-29	29	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	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	28	0	25	0	0	0	0
Net AM Passby Trips	0	0	0	0	0	28	0	-4	29	0	0	0
PM Pass-by Trips												
Eastbound (E-W Street)			Westbound (E-W Street)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
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	-71	71	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	81	0	78	0	0	0	0
Net PM Passby Trips	0	0	0	0	0	81	0	7	71	0	0	0
Pass-by Trips	Entering		Exiting									
	155		139		AM							
	283		280		PM							

Based on Trips Generated by APPROVED PLAN

2015
NO BUILD

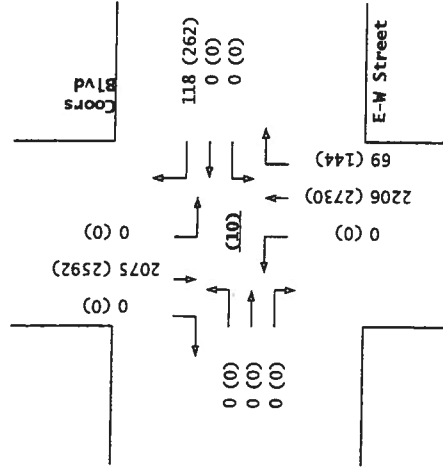


Trips



E-W Street / Coors Blvd

2015
BUILD



Andalucia Update (Montano Rd / Coors Blvd)

Projected Turning Movements Worksheet

Mirandela Rd / Coors Blvd

Based on Trips Generated by APPROVED PLAN

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

N-S Street: **Coors Blvd**

Year of Existing Counts: **2011**

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	96	0	0	88	0
Subtotal	0	0	0	0	0	0	0	2,094	0	0	1,930	0
Credit Union (Learning) Trips (South Tract)	0	0	0	0	0	10	0	10	0	10	10	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	10	0	2,104	0	10	1,940	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	2,170	44	92	1,983	0
Pass-by Trip Adjustments	0	0	0	0	0	25	0	-29	29	42	-42	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	106	0	2,141	73	134	1,941	0

Adjustment for Heavy EB Flow on Montano

	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	2,440	0	0	2,198	0
Background Traffic Growth	0	0	0	0	0	0	0	117	0	0	106	0
Subtotal	0	0	0	0	0	0	0	2,557	0	0	2,304	0
Credit Union (Learning) Trips (South Tract)	0	0	0	0	0	26	0	26	0	14	14	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	26	0	2,583	0	14	2,318	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	2,668	95	174	2,416	0
Pass-by Trip Adjustments	0	0	0	0	0	78	0	-71	71	88	-88	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	207	0	2,597	166	262	2,328	0

Number of Residential Trips Generated	35	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	1,998	0	0	1,842	0
2011 PM Peak Hr. Volumes	0	0	0	0	0	0	0	2,440	0	0	2,198	0

Pass-by Trip Calculations:

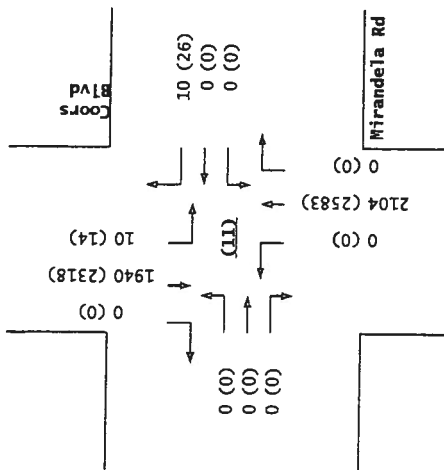
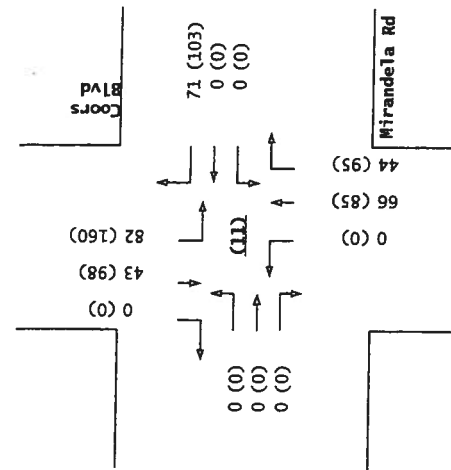
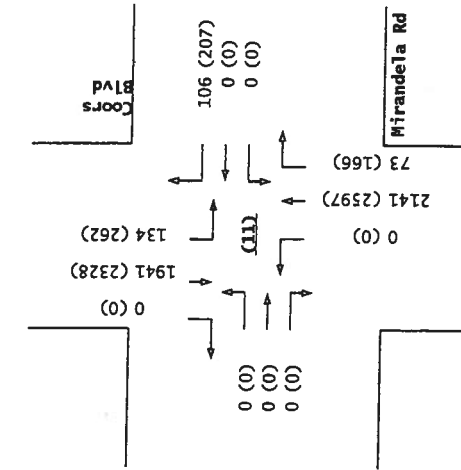
	Eastbound (Mirandela Rd)			Westbound (Mirandela Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
AM Pass-by Trips	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.00%	19.00%	27.00%	-27.00%	0.00%
Percent Entering	0	0	0	0	0	0	0	-29	29	42	-42	0
Volume Entering	0.00%	0.00%	0.00%	0.00%	0.00%	18.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Exiting	0	0	0	0	0	25	0	0	0	0	0	0
Volume Exiting	0	0	0	0	0	25	0	-29	29	42	-42	0
Net AM Passby Trips	0	0	0	0	0	25	0	-29	29	42	-42	0
PM Pass-by Trips	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-25.00%	25.00%	31.00%	-31.00%	0.00%
Percent Entering	0	0	0	0	0	0	0	-71	71	88	-88	0
Volume Entering	0.00%	0.00%	0.00%	0.00%	0.00%	28.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Exiting	0	0	0	0	0	78	0	0	0	0	0	0
Volume Exiting	0	0	0	0	0	78	0	-71	71	88	-88	0
Net PM Passby Trips	0	0	0	0	0	78	0	-71	71	88	-88	0
Pass-by Trips	155	139	AM	283	280	PM						

2015
BUILD

Trips

Based on Trips Generated by APPROVED PLAN

2015
NO BUILD



Mirandela Rd / Coors Blvd

Timings

3: Montiano Rd & Coors Blvd

Terry O. Brown, P.E.
11/4/2011 - Synchros 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Volume (vph)	245	1229	384	301	226	389	1260	652	670	1409	12
Turn Type	Prot	pm+ov	pm+ov	Prot	Prot	pm+ov	pm+ov	Prot	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	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Switch Phase	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Minimum Initial (s)	22.0	43.0	18.0	18.0	39.0	18.0	34.0	18.0	25.0	41.0	22.0
Minimum Split (s)	18.3%	35.8%	15.0%	15.0%	32.5%	15.0%	28.3%	15.0%	20.8%	34.2%	18.3%
Total Split (%)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Yellow 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 Time (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 Adjust (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Total Lost Time (s)	Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead/Lag Optimize?	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Recall Mode	15.2	38.0	56.0	13.0	35.8	13.0	29.0	47.0	20.0	36.0	56.2
Act Effct Green (s)	0.13	0.32	0.47	0.11	0.30	0.11	0.24	0.39	0.17	0.30	0.47
Actuated g/C Ratio	0.71	1.25	0.59	1.08	0.46	1.20	1.18	0.88	1.31	1.04	0.02
Control Delay	59.7	159.5	27.6	118.9	25.0	167.6	118.4	20.4	192.7	74.4	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	59.7	159.5	27.6	118.9	25.0	167.6	118.4	20.4	192.7	74.4	7.4
LOS	E	F	C	F	C	F	F	C	F	E	A
Approach Delay	118.3	67.0	96.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9
Approach LOS	F	F	F	F	F	F	F	F	F	F	F

Intersection Summary

Cycle Length: 120
 Actuated 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: 1.31
 Intersection Signal Delay: 104.3
 Intersection Capacity Utilization (102.7%)
 Analysis Period (min) 15

Intersection LOS: F
 ICU Level of Service G

Splits and Phases: 3: Montiano Rd & Coors Blvd



2015 AM Peak BUILD Conditions

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2005 Approved Plan

HCM Signalized Intersection Capacity Analysis

3: Montiano Rd & Coors Blvd

Terry O. Brown, P.E.
11/4/2011 - Synchros 7

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Volume (vph)	245	1229	384	301	226	389	1260	652	670	1409	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	1.00	1.00	1.00	0.85	1.00	0.94	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3291	3400	5036	2760	3400	5036	1568
Peak-hour factor, PHF	0.80	0.88	0.88	0.76	0.76	0.76	0.88	0.88	0.80	0.90	0.90
Adj. Flow (vph)	306	1397	435	396	297	204	442	1432	741	744	1566
RTOR Reduction (vph)	0	0	2	0	100	0	0	0	0	0	0
Lane Group Flow (vph)	Prot	7	4	5	3	8	5	2	3	1	6
Turn Type	Prot	7	4	5	3	8	5	2	3	1	6
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)	15.2	38.0	51.0	13.0	35.8	13.0	29.0	42.0	20.0	36.0	51.2
Effective Green, g (s)	15.2	38.0	51.0	13.0	35.8	13.0	29.0	42.0	20.0	36.0	51.2
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)	431	1110	732	368	982	368	1217	1081	567	1511	734
v/c Ratio Prot	0.09	c0.40	0.06	c0.12	0.12	0.13	c0.28	0.07	c0.22	0.31	0.00
v/c Ratio Perm	0.71	1.26	0.59	1.08	0.41	1.20	1.18	0.88	1.31	1.04	0.01
Uniform Delay, d1	50.3	41.0	26.5	53.5	33.6	53.5	45.5	33.3	50.0	42.0	19.8
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	5.3	123.8	1.3	68.7	0.3	107.2	85.7	1.2	152.7	33.1	0.0
Delay (s)	55.6	164.6	27.8	122.2	33.9	160.7	129.2	34.5	202.7	75.1	19.8
Level of Service	E	F	C	F	C	F	F	C	F	E	B
Approach Delay (s)	121.2	72.9	72.9	102.7	102.7	102.7	102.7	102.7	102.7	102.7	102.7
Approach LOS	F	F	F	F	F	F	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

108.1
 1.16
 120.0
 102.7%
 15

HCM Level of Service
 Sum of lost time (s)
 ICU Level of Service

F
 15.0
 G

2015 AM Peak BUILD Conditions

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2005 Approved Plan

Timings

3: Montano Rd & Coors Blvd

Terry O. Brown, P.E.
11/3/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4
Volume (vph)	275	406	503	470	1101	843	1814	246	382	1618	68
Turn Type	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot
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	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	10.0	21.0	10.0	21.0	10.0	21.0	10.0
Minimum 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 (s)	10.8%	22.3%	23.1%	21.5%	33.1%	23.1%	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	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Act Effct Green (s)	9.0	24.9	54.9	22.1	38.0	25.0	49.0	76.1	14.0	38.0	52.0
Actuated g/C Ratio	0.07	0.19	0.42	0.17	0.29	0.19	0.38	0.59	0.11	0.29	0.40
vc Ratio	1.25	0.67	0.83	0.87	1.34	1.34	1.00	0.16	1.07	1.19	0.12
Control Delay	180.7	54.5	45.7	50.1	192.0	199.3	45.6	8.0	122.0	135.1	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	180.7	54.5	45.7	50.1	192.0	199.3	45.6	8.0	122.0	135.1	24.3
LOS	F	F	D	D	F	F	D	A	F	F	C
Approach Delay	81.4	F	F	F	153.5	F	F	F	129.1	F	F
Approach LOS	F	F	F	F	F	F	F	F	F	F	F

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 78 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum Vc Ratio: 1.34
 Intersection Signal Delay: 112.0
 Intersection Capacity Utilization 115.4%
 Analysis Period (min): 15

Intersection LOS: F
 ICU Level of Service: H

Splits and Phases: 3: Montano Rd & Coors Blvd

19 s	a1	a2	a3	a4
15 s	a5	a6	a7	a8
30 s	a9	a10	a11	a12

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.
11/3/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4
Volume (vph)	275	406	503	470	1101	843	1814	246	382	1618	68
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt Permitted	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	0.94	0.91	0.91	0.93	0.93	0.93	0.96	0.96	0.92	0.92	0.92
Adj. Flow (vph)	283	448	553	505	1184	878	1880	256	393	1759	74
RTOR Reduction (vph)	0	0	4	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	293	446	549	505	1348	0	878	1880	232	393	1759
Turn Type	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot	pm+ov	Prot
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	24.9	49.9	22.1	38.0	25.0	49.0	71.1	14.0	38.0	47.0
Effective Green, g (s)	9.0	24.9	49.9	22.1	38.0	25.0	49.0	71.1	14.0	38.0	47.0
Actuated g/C Ratio	0.07	0.19	0.38	0.17	0.29	0.19	0.38	0.55	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	671	662	578	1005	654	1898	1616	366	1472	627
vis Ratio Prot	c0.09	0.13	0.16	0.15	c0.39	c0.26	0.38	0.02	0.12	c0.35	0.01
vis Ratio Perm	1.25	0.66	0.83	0.87	1.34	1.34	1.00	0.14	1.07	1.19	0.11
Uniform Delay, d1	60.5	48.7	36.2	52.6	46.0	52.5	40.4	14.5	58.0	46.0	27.6
Progression Factor	1.00	1.00	1.00	1.00	0.77	0.98	0.92	0.71	0.82	1.00	1.00
Incremental Delay, d2	141.4	2.5	8.4	7.7	157.0	161.2	16.1	0.0	88.1	94.7	0.1
Delay (s)	201.9	51.2	44.6	48.2	202.3	209.4	44.9	11.9	126.1	140.7	27.7
Level of Service	F	D	D	D	F	F	D	B	F	F	C
Approach Delay (s)	82.6	F	F	F	160.5	F	F	F	134.4	F	F
Approach LOS	F	F	F	F	F	F	F	F	F	F	F

Intersection Summary

HCM Average Control Delay: 116.2
 HCM Level of Service: F
 HCM Volume to Capacity ratio: 1.28
 Actuated Cycle Length (s): 130.0
 Intersection Capacity Utilization: 115.4%
 Analysis Period (min): 15
 Critical Lane Group: c

2015 PM Peak BUILD Conditions

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2005 Approved Plan

Timings

4: Delyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

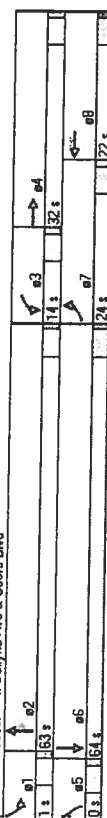
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	11	11	11	11	11	11	11	11	11
Volume (vph)	282	39	197	49	110	62	1737	139	95	2177
Turn Type	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Prot	Prot	Perm
Permitted Phases	7	4	3	8	8	2	2	1	6	6
Detector Phase	7	4	3	8	8	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0
Total Split (s)	24.0	32.0	14.0	22.0	10.0	63.0	63.0	11.0	64.0	64.0
Total Split (%)	20.0%	26.7%	11.7%	18.3%	8.3%	52.5%	52.5%	9.2%	53.3%	53.3%
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	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Ad. Eff. Green (s)	17.3	27.0	9.0	18.7	63.0	58.0	58.0	6.0	59.0	59.0
Actuated g/C Ratio	0.14	0.22	0.08	0.16	0.52	0.48	0.48	0.05	0.49	0.49
v/c Ratio	0.77	1.06	1.03	0.23	0.47	0.55	0.85	0.20	0.63	0.99
Control Delay	60.2	99.1	118.8	47.7	27.5	30.0	31.5	5.7	78.9	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.2	99.1	118.8	47.7	27.5	30.0	31.5	5.7	78.9	25.4
LOS	E	F	F	D	C	C	A	E	C	A
Approach Delay	81.4	80.9								
Approach LOS	F	F								

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: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 39.4
 Intersection Capacity Utilization 88.8%
 Analysis Period (min) 15

Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 4: Delyne Ave & Coors Blvd



2015 AM Peak BUILD Conditions

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2005 Approved Plan

HCM Signalized Intersection Capacity Analysis

4: Delyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	11	11	11	11	11	11	11	11	11
Volume (vph)	282	39	197	49	110	62	1737	139	95	2177
Ideal Flow (vphpl)	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
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91
Friction	1.00	0.87	1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.85
Friction Protected	0.95	1.00	0.95	1.00	1.00	1.00	0.95	1.00	1.00	0.95
Satd. Flow (prot)	3400	1600	3400	1845	1668	1752	5036	1568	3400	5036
Friction Permitted	0.95	1.00	0.95	1.00	1.00	1.00	0.91	1.00	0.95	0.91
Satd. Flow (perm)	3400	1600	3400	1845	1568	127	5036	1568	3400	5036
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.84	0.84	0.84	0.89	0.89	0.89
Adj. Flow (vph)	376	52	395	65	147	74	2068	165	107	2446
RTOR Reduction (vph)	0	60	0	0	68	0	0	65	0	14
Lane Group Flow (vph)	376	387	0	263	65	79	74	2068	100	107
Turn Type	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Prot	Prot	Perm
Permitted Phases	7	4	3	8	5	2	2	1	6	6
Actuated Green, G (s)	17.3	27.0	9.0	18.7	63.0	58.0	58.0	6.0	59.0	59.0
Effective Green, g (s)	17.3	27.0	9.0	18.7	63.0	58.0	58.0	6.0	59.0	59.0
Actuated g/C Ratio	0.14	0.22	0.08	0.16	0.52	0.48	0.48	0.05	0.49	0.49
Clearance Time (s)	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
Lane Grp Cap (vph)	490	360	255	288	244	134	2434	758	170	2476
v/c Ratio Prot	0.11	0.24	0.08	0.04	0.02	0.41	0.06	0.03	0.49	0.01
v/c Ratio Perm	0.77	1.07	1.03	0.23	0.32	0.55	0.85	0.13	0.83	0.99
Uniform Delay, d1	48.4	46.5	55.5	44.3	45.0	26.8	27.2	17.1	55.9	30.1
Progression Factor	1.00	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	64.7	0.4	0.8	4.9	3.9	0.4	3.6	10.1
Delay (s)	56.5	115.0	120.2	44.7	46.8	31.8	31.1	17.5	73.9	24.1
Level of Service	E	F	F	D	D	C	C	B	E	C
Approach Delay (s)	86.3									
Approach LOS	F									

Intersection Summary

HCM Average Control Delay 40.5
 HCM Volume to Capacity ratio 0.96
 Actuated Cycle Length (s) 120.0
 Intersection Capacity Utilization 88.8%
 Analysis Period (min) 15
 Critical Lane Group

2015 AM Peak BUILD Conditions

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2005 Approved Plan

Timings

4: Delyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/3/2011 - Synchro 7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	188	20	305	94	79	353	176	119	2068	148
Volume (vph)	188	20	305	94	79	353	176	119	2068	148
Turn Type	Prot	Prot	Prot	Perm	Perm	pm-prot	Perm	Prot	Prot	Perm
Protected Phases	7	4	3	8	8	2	2	1	6	6
Permitted Phases	7	4	3	8	8	2	2	1	6	8
Detector Phase	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Switch Phase	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0	10.0	21.0
Minimum Initial (s)	18.0	21.0	20.0	23.0	27.0	79.0	79.0	10.0	62.0	62.0
Minimum Split (s)	13.8%	16.2%	15.4%	17.7%	20.8%	60.8%	60.8%	7.7%	47.7%	47.7%
Total Split (%)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Yellow Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Total Lost Time (s)	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
Recall Mode	12.1	11.3	15.0	14.2	88.7	75.7	75.7	8.0	57.1	57.1
Act/Ext Green (s)	0.09	0.09	0.12	0.11	0.68	0.58	0.58	0.06	0.44	0.44
Actuated g/C Ratio	0.67	0.57	1.04	0.62	0.44	0.89	0.92	0.19	0.59	0.96
v/c Ratio	67.6	22.7	110.9	68.5	61.4	31.2	54	59.7	21.3	2.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	67.6	22.7	110.9	68.5	61.4	31.2	54	59.7	21.3	2.1
Total Delay	LOS	E	C	F	E	C	A	E	C	A
Approach Delay	49.6	D	F	F	F	F	F	F	F	F
Approach LOS	Intersection Summary									
Cycle Length: 130										
Actuated Cycle Length: 130										
Offset: 119 (92%), Referenced to phase 2-NBTL and 6-SBT, Start of Green										
Natural Cycle: 130										
Control Type: Actuated-Coordinated										
Intersection Signal Delay: 35.3										
Maximum v/c Ratio: 1.04										
Intersection Capacity Utilization 92.4%										
Analysis Period (min) 15										

Splits and Phases: 4: Delyne Ave & Coors Blvd



2015 PM Peak BUILD Conditions

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2005 Approved Plan

HCM Signalized Intersection Capacity Analysis

4: Delyne Ave & Coors Blvd

Terry O. Brown, P.E.
11/3/2011 - Synchro 7

Movement	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	188	20	305	94	79	353	176	119	2068	148
Volume (vph)	188	20	305	94	79	353	176	119	2068	148
Ideal Flow (vphpl)	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
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Fr	1.00	0.87	1.00	1.00	1.00	0.85	1.00	0.85	1.00	0.85
Fit Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	1811	3400	1845	1568	1752	5036	1568	3400	5036
Fit Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	1811	3400	1845	1568	1752	5036	1568	3400	5036
Peak-hour factor, P-HF	0.89	0.89	0.75	0.75	0.75	0.96	0.96	0.96	0.97	0.97
Adj. Flow (vph)	211	22	119	407	125	105	358	2698	183	123
RTOR Reduction (vph)	0	109	0	0	0	66	0	50	0	0
Lane Group Flow (vph)	211	32	0	407	125	39	368	2698	133	123
Turn Type	Prot	Prot	3	8	8	5	2	2	1	6
Protected Phases	7	4	3	8	8	2	2	1	6	6
Permitted Phases	7	4	3	8	8	2	2	1	6	6
Actuated Green, G (s)	12.1	11.3	15.0	14.2	14.2	88.7	75.7	75.7	8.0	57.1
Effective Green, g (s)	12.1	11.3	15.0	14.2	14.2	88.7	75.7	75.7	8.0	57.1
Actuated g/C Ratio	0.09	0.09	0.12	0.11	0.11	0.68	0.58	0.58	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	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
Lane Grp Cap (vph)	316	140	392	202	171	415	2833	913	209	2712
v/s Ratio Prot	0.06	0.02	c0.12	c0.07	c0.18	c0.54	c0.42	c0.04	c0.42	c0.06
v/s Ratio Perm	0.67	0.23	1.04	0.62	0.23	0.89	0.92	0.15	0.59	0.13
Uniform Delay, d1	57.0	55.3	57.5	55.3	52.9	41.4	24.4	12.4	59.4	35.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.53
Incremental Delay, d2	5.3	0.8	55.7	5.5	0.7	19.8	6.0	0.3	0.4	1.7
Delay (s)	62.3	56.1	113.2	60.9	53.6	61.1	30.5	12.7	59.8	37.1
Level of Service	E	E	F	E	D	E	C	B	E	C
Approach Delay (s)	E	E	F	F	F	F	F	F	F	F
Approach LOS	E	E	F	F	F	F	F	F	F	F
Intersection Summary										
HCM Average Control Delay	36.0									
HCM Volume to Capacity ratio	0.98									
Actuated Cycle Length (s)	130.0									
Intersection Capacity Utilization	92.4%									
Analysis Period (min)	15									
c Critical Lane Group										

2015 PM Peak BUILD Conditions

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2005 Approved Plan

Timings

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	173	1351	581	127	388	69	282	424	188	204	516
Volume (vph)	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl
Turn Type	7	4	5	3	8	1	5	2	2	6	6
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
Deflector Phase	7	4	5	3	8	1	5	2	2	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	10.0	21.0	10.0	10.0	10.0	10.0	21.0	10.0
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 (%)	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimizer?	None	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	52.0
Act Effect Green (s)	0.42	0.35	0.45	0.33	0.29	0.43	0.42	0.36	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	1.48dr
Control Delay	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
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	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
LOS	C	F	C	F	D	A	F	C	B	C	F
Approach Delay	108.7										
Approach LOS	F										

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 Capacity Utilization 117.3%

Analysis Period (min) 15

dr Deflector Right Lane. Record with 1 though lane as a right lane.

Intersection LOS: F

ICU Level of Service H

ICU Level of Service H

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HCM Signalized Intersection Capacity Analysis

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	173	1351	581	127	388	69	282	424	188	204	516
Volume (vph)	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl
Turn Type	7	4	5	3	8	1	5	2	2	6	6
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
Deflector Phase	7	4	5	3	8	1	5	2	2	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	10.0	21.0	10.0	10.0	10.0	10.0	21.0	10.0
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 (%)	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimizer?	None	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	52.0
Act Effect Green (s)	0.42	0.35	0.45	0.33	0.29	0.43	0.42	0.36	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	1.48dr
Control Delay	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
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	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
LOS	C	F	C	F	D	A	F	C	B	C	F
Approach Delay	108.7										
Approach LOS	F										

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 Capacity Utilization 117.3%

Analysis Period (min) 15

dr Deflector Right Lane. Record with 1 though lane as a right lane.

Intersection LOS: F

ICU Level of Service H

ICU Level of Service H

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ICU Level of Service H

HCM Signalized Intersection Capacity Analysis

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	173	1351	581	127	388	69	282	424	188	204	516
Volume (vph)	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl
Turn Type	7	4	5	3	8	1	5	2	2	6	6
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
Deflector Phase	7	4	5	3	8	1	5	2	2	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	10.0	21.0	10.0	10.0	10.0	10.0	21.0	10.0
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 (%)	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
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	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimizer?	None	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	52.0
Act Effect Green (s)	0.42	0.35	0.45	0.33	0.29	0.43	0.42	0.36	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	1.48dr
Control Delay	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
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	30.9	151.1	33.4	208.7	40.2	4.7	110.6	33.1	18.0	23.6	135.4
LOS	C	F	C	F	D	A	F	C	B	C	F
Approach Delay	108.7										
Approach LOS	F										

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 Capacity Utilization 117.3%

Analysis Period (min) 15

dr Deflector Right Lane. Record with 1 though lane as a right lane.

Intersection LOS: F

ICU Level of Service H

ICU Level of Service H

ICU Level of Service H

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ICU Level of Service H

HCM Signalized Intersection Capacity Analysis

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchros 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	173	1351	581	127	388	69	282	424	188	204	516
Volume (vph)	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl	pm-pl
Turn Type	7	4	5	3	8	1	5	2	2	6	6
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
Deflector Phase	7	4	5	3	8	1	5	2	2	6	6

Timings

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchro 7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	180	844	399	160	1325	202	565	565	166	176	520
Volume (vph)	180	844	399	160	1325	202	565	565	166	176	520
Turn Type	pm+pt	7	4	5	3	8	1	5	2	3	1
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
Protected Phases	4	4	4	4	4	4	4	4	4	4	4
Detector Phase	7	4	4	4	4	4	4	4	4	4	4
Switch Phase	7	4	4	4	4	4	4	4	4	4	4
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	10.0	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
Total Split (%)	11.5%	42.3%	19.2%	13.1%	43.8%	15.4%	19.2%	29.2%	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
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	Lead	Lead	Lead	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	None	None	None	None	None	None	None	None	None	None	None
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	60.9	50.9	75.9	63.1	52.0	70.6	53.0	34.4	50.5	41.6	28.0
Actuated g/C Ratio	0.47	0.39	0.58	0.49	0.40	0.54	0.41	0.26	0.39	0.32	0.22
v/c Ratio	0.98	0.49	0.44	0.50	1.04	0.25	1.03	0.68	0.27	0.57	1.02
Control Delay	82.8	32.8	22.3	22.3	72.9	12.0	80.1	47.7	8.8	38.9	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
Total Delay	82.8	32.8	22.3	22.3	72.9	12.0	80.1	47.7	8.8	38.9	86.7
LOS	F	C	C	C	E	B	F	D	A	D	F
Approach Delay	36.7										
Approach LOS	D										

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 18 (14%), Referenced to phase 2:NBT and 6:SBTL Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 57.1
 Intersection Capacity Utilization 100.0%
 Analysis Period (min) 15

Intersection LOS: E
 ICU Level of Service F

Splits and Phases: 7: Montano Rd & Fourth St



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HCM Signalized Intersection Capacity Analysis

7: Montano Rd & Fourth St

Terry O. Brown, P.E.
11/3/2011 - Synchro 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	180	844	399	160	1325	202	565	565	166	176	520
Volume (vph)	180	844	399	160	1325	202	565	565	166	176	520
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	0.85	1.00	1.00	0.85	1.00	0.95	1.00	0.85	1.00
Satd. Flow (vphpl)	1752	3505	1568	1752	3505	1568	3400	3505	1568	1752	3505
Flt Permitted	0.08	1.00	1.00	0.28	1.00	1.00	0.12	1.00	0.26	1.00	1.00
Satd. Flow (vphpl)	145	3505	1568	508	3505	1568	434	3505	1568	476	3505
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
Adj. Flow (vph)	189	678	420	176	1456	222	652	636	187	193	571
RTOR Reduction (vph)	0	0	54	0	0	0	28	0	0	92	0
Lane Group Flow (vph)	189	678	366	176	1456	194	652	636	95	193	743
Turn Type	pm+pt	7	4	5	3	8	1	5	2	3	1
Protected Phases	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4
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
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
Actuated g/C Ratio	0.47	0.39	0.55	0.49	0.40	0.50	0.41	0.26	0.35	0.32	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
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)	192	1372	915	353	1402	852	633	927	609	286	726
v/s Ratio Prot	c0.08	0.19	0.06	0.04	c0.42	0.02	c0.16	0.18	0.01	0.07	0.22
v/s Ratio Perm	0.39	0.17	0.17	0.20	0.20	0.10	c0.26	0.05	0.05	0.15	0.15
v/c Ratio	0.98	0.49	0.40	0.50	1.04	0.23	1.03	0.69	0.16	0.67	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
Progression Factor	0.64	1.04	1.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	57.7	0.3	0.3	1.1	34.6	0.1	43.7	4.1	0.1	6.2	39.6
Delay (s)	81.5	31.4	34.0	21.5	73.6	18.2	83.2	47.0	29.2	40.5	90.6
Level of Service	F	C	C	C	E	B	F	D	C	D	F
Approach Delay (s)	39.6										
Approach LOS	D										

Intersection Summary

HCM Average Control Delay
 HCM Volume to Capacity ratio
 Actuated Cycle Length (s)
 Intersection Capacity Utilization
 Analysis Period (min)
 Critical Lane Group

58.7
 0.97
 130.0
 100.0%
 15

HCM Level of Service
 Sum of lost time (s)
 ICU Level of Service

E
 10.0
 F

2015 PM Peak BUILD Conditions

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HCM Unsignalized Intersection Capacity Analysis

8: Montano Rd & Winterhaven Rd

Terry O. Brown, P.E.
11/4/2011 - Synchros 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	2173	39	154	479	53	0	0	186	0	0	34
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	38	2587	46	186	577	64	0	0	248	0	0	45
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	641			2633			3368	3675	1293	2598	3690	320
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	641			2482			3520	3955	587	2431	3975	320
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			0			0	0	22	0	0	93
cM capacity (veh/h)	933			127			0	0	319	0	0	672
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	38	1293	1293	46	186	385	256	248	45			
Volume Left	38	0	0	0	186	0	0	0	0			
Volume Right	0	0	0	46	0	0	64	248	45			
cSH	933	1700	1700	1700	127	1700	1700	319	672			
Volume to Capacity	0.04	0.76	0.76	0.03	1.46	0.23	0.15	0.78	0.07			
Queue Length 95th (ft)	3	0	0	0	319	0	0	155	5			
Control Delay (s)	9.0	0.0	0.0	0.0	308.2	0.0	0.0	46.7	10.7			
Lane LOS	A				F			E	B			
Approach Delay (s)	0.1				69.2			46.7	10.7			
Approach LOS								E	B			
Intersection Summary												
Average Delay			18.4									
Intersection Capacity Utilization			78.3%		ICU Level of Service				D			
Analysis Period (min)			15									

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

Terry O. Brown, P.E.
11/4/2011 - Synchro 7

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	847	30	294	1438	342	0	0	192	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	0.75	0.75	0.75	0.82	0.82	0.82
Hourly flow rate (vph)	69	873	31	309	1514	360	0	0	256	0	0	98
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	1874			904			2485	3504	437	3143	3355	937
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1874			828			2466	3522	344	3149	3368	937
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			60			100	100	59	100	100	63
cM capacity (veh/h)	313			765			5	3	626	1	3	264
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	69	437	437	31	309	1009	865	256	98			
Volume Left	69	0	0	0	309	0	0	0	0			
Volume Right	0	0	0	31	0	0	360	256	98			
cSH	313	1700	1700	1700	765	1700	1700	626	264			
Volume to Capacity	0.22	0.26	0.26	0.02	0.40	0.59	0.51	0.41	0.37			
Queue Length 95th (ft)	21	0	0	0	49	0	0	50	41			
Control Delay (s)	19.7	0.0	0.0	0.0	12.9	0.0	0.0	14.7	26.4			
Lane LOS	C				B			B	D			
Approach Delay (s)	1.4				1.8			14.7	26.4			
Approach LOS								B	D			
Intersection Summary												
Average Delay			3.3									
Intersection Capacity Utilization			62.3%		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.
11/4/2011 - Synchros 7

	→	↘	↙	←	↗	↖
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	2417	134	0	683	0	83
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.85	0.85
Hourly flow rate (vph)	3180	176	0	899	0	98
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			3357		3630	1590
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3516		3911	961
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	45
cM capacity (veh/h)			47		2	176
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	1590	1590	176	449	449	98
Volume Left	0	0	0	0	0	0
Volume Right	0	0	176	0	0	98
cSH	1700	1700	1700	1700	1700	176
Volume to Capacity	0.94	0.94	0.10	0.26	0.26	0.55
Queue Length 95th (ft)	0	0	0	0	0	72
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	48.3
Lane LOS						E
Approach Delay (s)	0.0			0.0		48.3
Approach LOS						E
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			78.6%		ICU Level of Service	D
Analysis Period (min)			15			

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

Terry O. Brown, P.E.
11/4/2011 - Synchro 7

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Volume (veh/h)	839	175	0	1733	0	117
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.85	0.85
Hourly flow rate (vph)	902	188	0	1863	0	138
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			1090		1834	451
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			883		1707	174
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	82
cM capacity (veh/h)			682		73	754
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	451	451	188	932	932	138
Volume Left	0	0	0	0	0	0
Volume Right	0	0	188	0	0	138
cSH	1700	1700	1700	1700	1700	754
Volume to Capacity	0.27	0.27	0.11	0.55	0.55	0.18
Queue Length 95th (ft)	0	0	0	0	0	17
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.8
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.8
Approach LOS						B
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			51.2%		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.
11/4/2011 - Synchros 7

															
Movement	WBL	WBR	NBT	NBR	SBL	SBT									
Lane Configurations															
Volume (veh/h)	0	118	2206	69	0	2095									
Sign Control	Stop		Free			Free									
Grade	0%		0%			0%									
Peak Hour Factor	0.85	0.85	0.88	0.88	0.88	0.88									
Hourly flow rate (vph)	0	139	2507	78	0	2381									
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	3340	666					2585								
vC1, stage 1 conf vol															
vC2, stage 2 conf vol															
vCu, unblocked vol	2886	666					2585								
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	65					100								
cM capacity (veh/h)	9	400					163								
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3							
Volume Total	139	716	716	716	437	794	794	794							
Volume Left	0	0	0	0	0	0	0	0							
Volume Right	139	0	0	0	78	0	0	0							
cSH	400	1700	1700	1700	1700	1700	1700	1700							
Volume to Capacity	0.35	0.42	0.42	0.42	0.26	0.47	0.47	0.47							
Queue Length 95th (ft)	38	0	0	0	0	0	0	0							
Control Delay (s)	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
Lane LOS	C														
Approach Delay (s)	18.7	0.0					0.0								
Approach LOS	C														
Intersection Summary															
Average Delay			0.5												
Intersection Capacity Utilization			47.1%	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.
11/4/2011 - Synchro 7

													
Movement	WBL	WBR	NBT	NBR	SBL	SBT							
Lane Configurations													
Volume (veh/h)	0	262	2730	144	0	2592							
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	308	2844	150	0	2700							
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	3819	786			2994								
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	3561	786			2994								
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	7			100								
cM capacity (veh/h)	3	333			112								
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3					
Volume Total	308	812	812	812	556	900	900	900					
Volume Left	0	0	0	0	0	0	0	0					
Volume Right	308	0	0	0	150	0	0	0					
cSH	333	1700	1700	1700	1700	1700	1700	1700					
Volume to Capacity	0.93	0.48	0.48	0.48	0.33	0.53	0.53	0.53					
Queue Length 95th (ft)	233	0	0	0	0	0	0	0					
Control Delay (s)	68.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Lane LOS	F												
Approach Delay (s)	68.3	0.0					0.0						
Approach LOS	F												
Intersection Summary													
Average Delay			3.5										
Intersection Capacity Utilization			64.9%	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.
11/4/2011 - Synchros 7

																	
Movement	WBL	WBR	NBT	NBR	SBL	SBT											
Lane Configurations																	
Volume (veh/h)	0	106	2141	73	154	1941											
Sign Control	Stop		Free			Free											
Grade	0%		0%			0%											
Peak Hour Factor	0.85	0.85	0.88	0.88	0.88	0.88											
Hourly flow rate (vph)	0	125	2433	83	175	2206											
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	3560	650			2516												
vC1, stage 1 conf vol																	
vC2, stage 2 conf vol																	
vCu, unblocked vol	2733	0			1336												
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	85			54												
cM capacity (veh/h)	6	808			379												
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4								
Volume Total	125	695	695	695	431	175	735	735	735								
Volume Left	0	0	0	0	0	175	0	0	0								
Volume Right	125	0	0	0	83	0	0	0	0								
cSH	808	1700	1700	1700	1700	379	1700	1700	1700								
Volume to Capacity	0.15	0.41	0.41	0.41	0.25	0.46	0.43	0.43	0.43								
Queue Length 95th (ft)	14	0	0	0	0	59	0	0	0								
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	22.4	0.0	0.0	0.0								
Lane LOS	B					C											
Approach Delay (s)	10.3	0.0				1.6											
Approach LOS	B																
Intersection Summary																	
Average Delay			1.0														
Intersection Capacity Utilization			47.4%	ICU Level of Service		A											
Analysis Period (min)			15														

HCM Unsignalized Intersection Capacity Analysis

11: Mirandela Ave & Coors Blvd

Terry O. Brown, P.E.
11/4/2011 - Synchro 7

										
Movement	WBL	WBR	NBT	NBR	SBL	SBT				
Lane Configurations										
Volume (veh/h)	0	207	2597	166	262	2328				
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	244	2705	173	273	2425				
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	0.62	0.62				0.62				
vC, conflicting volume	4146	763				2878				
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	2987	0				928				
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				39				
cM capacity (veh/h)	3	665				447				
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	244	773	773	773	559	273	808	808	808	
Volume Left	0	0	0	0	0	273	0	0	0	
Volume Right	244	0	0	0	173	0	0	0	0	
cSH	665	1700	1700	1700	1700	447	1700	1700	1700	
Volume to Capacity	0.37	0.45	0.45	0.45	0.33	0.61	0.48	0.48	0.48	
Queue Length 95th (ft)	42	0	0	0	0	99	0	0	0	
Control Delay (s)	13.5	0.0	0.0	0.0	0.0	24.9	0.0	0.0	0.0	
Lane LOS	B					C				
Approach Delay (s)	13.5	0.0				2.5				
Approach LOS	B									
Intersection Summary										
Average Delay			1.7							
Intersection Capacity Utilization			61.6%	ICU Level of Service				B		
Analysis Period (min)			15							

2015 PM Peak BUILD Conditions

2005 Approved Plan

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